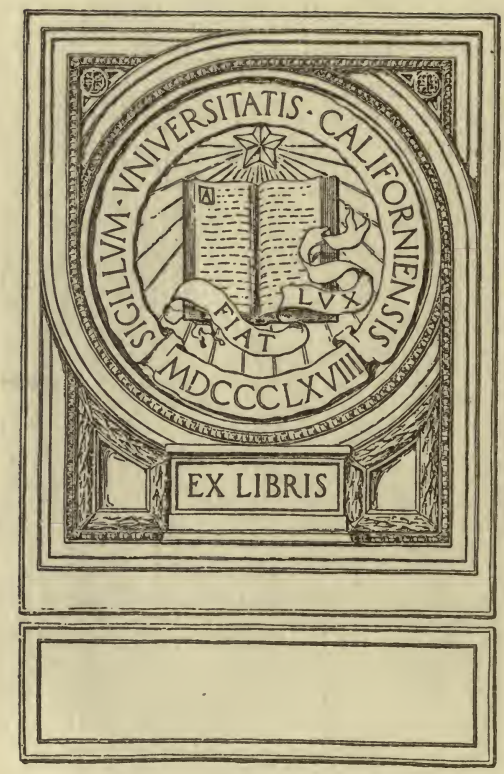
MODERN ECONOMIC TENDENCIES

SIDNEY A. REEVE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MODERN ECONOMIC TENDENCIES

UNIV. OF CALIFORNIA

MODERN ECONOMIC TENDENCIES

An Economic History of America

BY

SIDNEY A. REEVE

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TO THE MEMORY OF
Edward Bellamy

PREFACE

In a work portraying economic evolution from a time generations in the past down to the latest practicable moment, in order to form a basis as accurate as possible for predicting the future, it is important to know the date of actual writing. The procession of events during the last six years has altered so drastically, and has transformed so many times, the complexion of public opinion, that words must be interpreted in the light of the date of their utterance.

This book was begun in the winter of 1912-13, as soon as the data from the census of 1910 had become available, and some portions remain unchanged since then. On the other hand, some statistical features have been brought down to the fall of 1917, with views in the text to correspond. During 1918 and 1919 the diction of the entire book was revised, and in the latter year the order of chapters was shifted. Occasional foot-notes or paragraphs were added which carry with them evidence of their later date. But, since it was manifestly impossible to bring the entire book into consistency with the viewpoint of these later years, unless it were to be entirely rewritten, care was taken to preserve all of the sentiments of the book in substance as they had been written in 1917 or before.

The subdivision of the book into four Parts, namely, Background, Economic Principles, Data and Social Reactions, was an afterthought. Each of these four parts comprise references to all four of these topics.

In essential, the structure of the book remains that of a history of American economic evolution from early in the nineteenth century down to the entrance of this country into the Great War of 1914. As to the huge economic changes wrought by the war itself, then not only unfinished but regarded by many as hanging precariously in balance, barely an attempt at their inclusion has been made. The still more significant changes which have occurred since the armistice of November, 1918, are represented only as sheer predictions, made from the basis created by the book for that purpose.

So far as these latest changes have proceeded they corroborate not only the predictions made in the book, but the principle on which those predictions were made, namely, history's repetition of itself. The results of the Great War in matters economic have been a close parallel with those resultant from the Civil War, and from the Spanish War of 1898, except that all scales of magnitude have been increased. But, just as those basic economic tendencies which this book reveals as having proceeded steadily ever since long before the Civil War, and continued down to the latest moment, with a scarcely perceptible waver in deference to either that war or the war of 1898—with acceleration, indeed, by each of those wars—so it is only natural to remark now how slightly this path of social evolution has been altered by even the Great War of 1914, except in its acceleration thereby. We have no excuse for doubt as to what is coming.

The material embodied in this book was originally collected to form only the first volume of a two-volume work. But it has so expanded in amount and importance during its preparation, and the doubt as to when the second volume might be completed has become so great, while the urgency of the times for remedial information has become so intense, that the second volume will appear later under an independent title: "The Evolution of Social Crises." Its task is to trace the growth of social crises of the past, in other lands as well as our own, as another step toward the formulation of a natural science of cause and effect in social evolution. For our possession of such a science would equip us for the prediction of all future crises before they become acute; and with accurate prediction their violence might be much softened, even if they might not be altogether prevented.

The chapter of the present book upon Unemployment also comprises some allusions to the author's past work in the field of thermodynamics and energetics, as set forth in his volume entitled: "Energy" (1909), from which viewpoint all problems in sociology must be stated if they are ever to receive accurate solution. This correlation of the natural energetic sciences into a circle destined to be crowned by their highest development of all, sociodynamics, has already been mapped out and partly committed to paper, to form later a separate work entitled: "The Elements of Social Energetics." It is as a foreshadowing of this later work that some of the technical passages in this present book can be better understood.

The author wishes to acknowledge the invaluable assistance of Mr. W. W. Harris, formerly city-editor of the New York *Telegram* and *Evening Sun,* in guiding the manner of presentation of so technical a subject as social evolution, so as to be acceptable to the largest number of readers. But it would not be fair nor correct to make Mr. Harris responsible for any of the specific and somewhat radical views set forth herein, however he may be in sympathy with their general tenor.

This book represents what the author believes should have been the major duty and official business of the entire profession of economists and sociologists during the last quarter-century. It was during the winter of 1889-90 that the author, instigated by reading Henry George's "Progress and Poverty" and Edward Bellamy's "Looking Backward," and having just reached the age of interest in public affairs, perceived the striking crudities of the commercial system as the one crucial problem destined to form the nucleus around which the next generation of progress must gather shape. So vast are the aggregates of human effort involved in this question that it was to him indubitable at that time—although then one saw the word socialism in print not twice a year—that those men who were busying themselves with the formation of such enterprises as the Standard Oil Company, the Pennsylvania Railroad or the United States Steel Corporation were playing at tops and marbles, in comparison with the man's job of straightening out our world-system of economics as a whole.

This opinion every day's news since then has corroborated. The author cannot understand how the men whom he meets in daily life, and still less those who are charged with national affairs or professional sociology, can live and delve and die with eyes and minds sealed to this vast, protuberant, overwhelming fact. Yet still one is forced to argue that there is something there worthy of notice!

Circumstances have required the author to handle this vast topic during the spare time of a life which had first to support a family. The task which should have been shared with the entire profession of economists he has had to compass single-handed. It is hoped that this fact may serve as pardon for those errors sure to be revealed in a work which has been conscientiously compiled. It should also excuse the lateness of its appearance in the face of a crisis so great that, judging mathematically from previous crises, each minute of delay in effective action, on the part of this great energetic nation, condemns one additional wretch to writhe and die in the throes of the coming world-revolution.

NEW YORK CITY,
December, 1920.

CONTENTS

PART I

THE BACKGROUND

CHAPTER PAGE

I.—THE APPROACH 1

II.—THE SOLE AIM OF INDUSTRY: LIFE-SUPPORT... 37

III.—THE COTTAGE-SYSTEM AND THE FACTORY-SYSTEM 45

PART II

ECONOMIC PRINCIPLES

IV.—PRODUCTION 55

V.—CREDIT 71

VI.—THE BASIC CONTRAST IN ECONOMICS........ 127

VII.—THE MARKET-SYSTEM, OR COMMERCIALISM..... 159

VIII.—THE EFFICIENCY OF SOCIAL ORGANIZATION..... 178

IX.—THE WEAPONS OF COMMERCIAL COMBAT....... 191

X.—INTEREST AND DIVIDENDS........ 204

XI.—ECONOMIC EQUILIBRIUM, OR "CHARGING ALL THE TRAFFIC WILL BEAR"........ 232

XII.—OTHER FEATURES OF INTEREST........ 254

XIII.—THE IRREVOCABILITY OF INTEREST........ 332

XIV.—COMMERCIAL COMPETITION AND ENTROPITS..... 343

PART III

DATA

XV.—RECENT ECONOMIC HISTORY........ 357

XVI.—WAGES AND SALARIES........ 441

XVII.—WEALTH, INTEREST AND AGGREGATE COMMERCIALISM 458

XVIII.—INDIRECT LIGHT UPON THE GROWTH OF COMMERCIALISM 484

XIX.—THE COST OF LIVING........ 524

PART IV

SOCIAL REACTIONS

CHAPTER PAGE
XX.—UNEMPLOYMENT 579
XXI.—PANICS AND CRISES........................... 648
XXII.—MISCELLANY 672
XXIII.—THE EVOLUTION OF AMERICAN CIVIC CONSCIOUSNESS 703
Mezzanine Chapter.—THE AUTHOR'S POINT OF VIEW..... 711
XXIV.—THE REMEDY—CONSUMERISM AND CONSUMERATION 723
XXV.—THE PATH BEFORE US........................... 775

NOTE
1.—THE MATHEMATICAL LAW OF CHARGING ALL THE TRAFFIC WILL BEAR........................... 839
2.—THE ORIGIN OF BOLSHEVISM........................... 843

SYNOPTICAL TABLE OF CONTENTS

PART I.—THE BACKGROUND

CHAPTER I: THE APPROACH.—An outline of the material development of the United States from colonial times to the middle of the nineteenth century.

Diseases of nations more important than those of individuals; solution of present ills to be found in a study of the growth of the past into the present; contrast between 1815 and 1915; cotton-culture; transportation and communication; the era of anthracite; the dawn of modern technical development; engineering history of the nineteenth century; the blunder of 1840 in economics.

CHAPTER II: THE SOLE AIM OF INDUSTRY: LIFE-SUPPORT.—Settles at the start the aim of all economic effort: *"Feed the Ultimate Consumer!"* Judges all institutions in terms of this criterion and ascribes all confusion of mind to its neglect.

Economic institutions underlie and control political ones; the aim of all economic institutions: ''Feed the Ultimate Consumer!'' Our economic motor-nerves; the Ultimate Consumer the sole sovereign of all industry; value and valuation.

CHAPTER III: THE COTTAGE-SYSTEM AND THE FACTORY-SYSTEM.—Draws contrast between the industrial system prevalent in the eighteenth to early nineteenth centuries, and that which had replaced it by the end of the nineteenth.

The cottage-system that which replaced the feudal system; the cottage-system in turn replaced by the factory-system; this replacement results in a marvelous development of material wealth; the characteristic of the cottage-system is ownership-in-industry, while that of the factory-system is the abolition of all ownership-in-industry; the cottage-system based upon universal competition, while the factory-system is based upon enforced monopoly; the cottage-system based upon commercial, interest-bearing credits, while the factory-system is based upon free, non-interest-bearing credit.

PART II.—ECONOMIC PRINCIPLES

CHAPTER IV: PRODUCTION.—Explains the organization of production and debates the laws governing its current volume; this not determined by free will or voluntary preference, but by relentless, automatic laws of economic equilibrium. First lesson in involuntary social subconsciousness.

Definition; specialization of tasks and interchange of work; factory-credit; the national factory-system; volume of production; personnel of the factory-system. *"Nothing can be produced Unless it can be Sold."*

CHAPTER V: CREDIT.—Explains the vital function of credit in either permitting a community to exert itself for its own life-support and prosperity, or, by its absence, paralyzing all effort and impoverishing a potentially rich nation; also traces the history of credit.

Credit the economic catalytic; the function of a catalytic; the nature and function of credit; the function of gold; the vital importance of credit; the transforming power of credit; history of commercial credit; English "tallies"; classification of forms of credit; commercial authorities quoted; recent instances of credit-expansion; first glimpses of the nature of interest; the true owners of credit; commercial credit versus factory-credit. Second lesson in involuntary social subconsciousness; effects upon society independent of moral intent. Re-invested credits; the expansion of 1901; Russell Sage and other commercial authorities; confiscation; the century's accumulation of interest-bearing securities; insurance-credit; commercial insurance versus natural insurance; credit-bases; economic reform necessarily embodies a new system of credit; the function of ethics in economic reform.

CHAPTER VI: THE BASIC CONTRAST IN ECONOMICS.—Shows the dual nature of the modern industro-commercial system, in parallel with duality everywhere else.

Production versus negotiation; the factory-system versus the market-system; deadly parallel between the two; the economic despot; charging all the traffic will bear; the equities of ownership-in-industry; the ethics of commercialism; the true source of all material wealth; ownership-in-industry a parasite upon productivity; industrial anarchy; the great economic question of the day—is ownership-in-industry growing upon us? The dual progress of economic evolution; centralization through consolidation versus decentralization through invention; the modern factory-system; economic motive forces; profit-sharing; discontent; the basic contrast running through all energetic sciences.

Chapter VII: THE MARKET-SYSTEM, OR COMMERCIALISM.—Defines the modern development of that antiquated feature: ownership-in-industry, which was peculiarly characteristic of the obsolete cottage-system.

The ramifying intricacy of the market-system; transportation and communication the creators of modern commercialism; human demand unlimited; artificial enticements to buy unnecessary; retail commercialism; the Ultimate Consumer the sole source of economic power; contributory commercialism; the national market-system; commercialism always antagonistic in nature; human nature and social reorganization; the basic economic contrast again; futility of welfare-work: the commercial tourney; emulation and competition.

Chapter VIII: THE EFFICIENCY OF SOCIAL ORGANIZATION.—Debates the efficiency of the industro-commercial system of the nation, when considered as a unit.

Relationships versus components; sociology astray on individualism; social architecture; bitter social philosophy; social versus individual evolution; the basic economic contrast again; natural cost; value; valuation; efficiency of economic organization; the one-hundred-per-cent community; polling the economic community; personal efficiencies; aggregate economic energies.

Chapter IX: THE WEAPONS OF COMMERCIAL COMBAT.—Discusses the mechanism of offense and defense employed by the commercial world in its unremitting internal warfare.

Definitions: Productivity and wages; commercialism and diluits; rent; interest and dividends; entropits; costs of doing business; rent again.

Chapter X: INTEREST AND DIVIDENDS.—Opens debate as to the one most formidable weapon of all the accoutrements of commercial militarism.

The Ultimate Consumer the sole source of all interest; expansion of facilities; initiative; investment an opportunity rather than a burden; risk in commercialism; commercial privateering; initiative and expansion in the factory-system; capital versus capitalism; theories of interest; interest warranted by original act? interest as a promoter of thrift? income and outgo of interest; depreciation; commercial authorities on the origin of capitalism; interest as a fruit of unproductivity? opportunity for investment; water or dust; economic hypnosis; economic equilibrium.

CHAPTER XI: ECONOMIC EQUILIBRIUM, OR "CHARGING ALL THE TRAFFIC WILL BEAR."—Discusses the forces the balance between which determines quantities and qualities at each point in the economic system. One of the four most important chapters in the book.

Gravitation of economic phenomena toward a stable balance; increase of profits with decrease of trade; illustration of the flour-supply; competition no bar to raising prices, but a compulsion to raise them; increasing costs of doing business; character of forces at work; psychology or morality not a factor; the seller hired by the community to raise prices; higher prices restrict trade; computation of the point of maximum income to the seller; community-nutrition; mathematical law of charging all the traffic will bear; trade everywhere paralyzed by commercialism; competition the death of trade; factors determined automatically by economic equilibrium; society's universal automatic brake; the fluidity of economic forces; the commercial brake upon civilization; life under adversity; social erosion; modern patriotism; modern lack of liberty.

CHAPTER XII: OTHER FEATURES OF INTEREST.—Carries the debate as to the nature and effect of interest into many important questions of the day.

Bonds; preferred and common stock; gradation of commercial risk; stock without face-value; watered stock; the origins of capitalism; thrift and capitalism; reinvested dividends; surplus; the Ultimate Consumer the sole source of all capitalism; recent acceleration of surplus-looting; who owns the surplus? surplus the foundation of commercialism; cost of replacement; prices of materials, interest-charges and valuation of principal always mutually linked in balance; watered stock; commercial authorities under oath; the railway-corporations and the surplus; commercial "costs"; the Kansas City Union Depot; economic liberty; the true equities of commercial ownership; the true origin of all capitalism; principles underlying price-making; charging all the profits will bear; passive and active capitalism; Professor Fisher's theory of interest; who loans, and who pays interest? factory-system capital for expansions; pioneering under commercialism; submarine economics; foresight and commercialism; proprietary rewards and progress; the blunder of 1840; economic patriotism; capitalism and immigration; commercialism versus socialism; the "use" or productivity theory of interest; dependence of capital-valuation upon income; the Ultimate Consumer again proved the sole source of all capitalism; zero interest-rates; the railway-problem in outline; stock-watering; dividends on dead horses; recent expansion of capitalization; normal commercialism; summary of the essential factors in the nature of interest.

CHAPTER XIII: THE IRREVOCABILITY OF INTEREST. —Can a charitable destination of interest redeem the evil of its birth?

Income versus outgo of interest; petty capitalism breeds petty ethics; wealth and charity; ineffectiveness of charity; basic economic contrast again.

CHAPTER XIV: COMMERCIAL COMPETITION AND ENTROPITS.—Discusses the active, energetic, aggressive friction and impact of the commercial world, with accurate definitions of itself and its effects.

Subdivisions of entropits; does advertising increase trade? Trade depressed by all forms of commercialism; advertising as an educator; advertising as a false stimulant of journalism; the fetish of the twentieth century; commercialism consists in acquiring what one doesn't want, because others will be sure to want it.

PART III.—DATE

CHAPTER XV: RECENT ECONOMIC HISTORY.—Reviews the statistical data available as to the economic development of the United States during the seven decades from 1845 to 1915.

Per-capita data; density of population; drift from agricultural to technical vocations; drift from domestic to wage-earning vocations; these drifts as worldwide tendencies; congestion in cities; distribution of urban population; average growth versus individual growth; the world-drift into cities; migration enforced by commercialism; editorial acumen; social involuntariness again; growth of the nation's life-support; program of analysis of the nation's efficiency of economic organization; evolution of life-support in the United States; prosperity, disparity and discontent; the nullified law of supply and demand; futile reforms; traffic charged all it will bear; national vanity; automatic involuntariness again; increase in technical wealth; women in gainful employment; the nation's occupations analyzed; classification of occupations; basic statistics, as to production and commercialism, in contrast; the quantity x; America in 1850; the quantity y; relative growth of technology and commercialism; subconscious social versus conscious individual forces; competitive or commercial occupations; a factory-system metropolis; economics and esthetics; opera under commercialism; esthetic decadence through commercialism; confusion profitable under commercialism; economic versus moral dissipation; indirect commercial waste; social metabolism; relative rates of growth; non-combatant costs; commercialism becoming critical; science and technology as aids to commercialism; automatic involuntariness again; wanted—a science

CHAPTER XVI: WAGES AND SALARIES: Chiefly Statistical.

Population versus personnel; statistics of wages; maxima and minima of wages; wage-coefficients; salaries; general trend of wages and salaries; aggregate wages and salaries paid by the Ultimate Consumer, 1850 to 1910; dilution of the Ultimate Consumer's purchasing-power.

CHAPTER XVII: WEALTH, INTEREST AND AGGREGATE COMMERCIALISM.—Brings together the data as to classification of individuals accomplished in Chapter XV, with that as to relative ability collected in Chapter XVI, to a synthetic determination of the efficiency with which the nation's industro-commercial system makes use of the Ultimate Consumer's dollar. One of the three or four pivotal chapters of the book.

Interest paid upon all forms of property; the interest-rate; aggregate interest-burden upon the Ultimate Consumer; the heart of the body-economic; current commercial dissipation of economic energy; our mysterious economic cancer identified; struggle between capital and labor a side-issue; national economic efficiency; unimportance of the personal factor; the author's estimates; graphs of our degradation of economic efficiency; increase in our material basis for enjoyment; our loss in social vitality exceeds that measurable in economic energy; our social evolutionary air-brake; concrete applications; the reader's responsibility.

CHAPTER XVIII: INDIRECT LIGHT UPON THE GROWTH OF COMMERCIALISM.—A Review of various side-aspects of modern economic society.

Transportation and communication; invention; commercialism and journalism; automatic involuntariness again; modern muzzling of free speech; history of journalism; ''boiler-plate''; growth of advertising; charging literature all the profits will bear; outdoor display; manufactures; centralization or decentralization; the latter our real problem; decentralization in series and in parallel; the high cost of buying; growth of factories in size; the ''harvester-trust''; particular manufactures; ethics and social evolution; the time-factor in social evolution.

CHAPTER XIX: THE COST OF LIVING.—Chiefly Statistical.

The price-index; general principles of price-determination; technical education and prices; effect of gold-supply upon prices; price-variations during past centuries; professional economists and the gold-theory of prices; density of population and prices; supply and demand as determinants of prices; commercial distortion of natural supply and demand; the function of psychic forces; summary; influence of war upon prices; identity of war and commercialism; source of credit-expansion; the tides of war; war-credits and prices; peace and commercialism; cost of war; replacement of martial by commercial militarism; cumulative nature of commercialism; credit as the social catalytic; taxation.

PART IV.—SOCIAL REACTIONS

CHAPTER XX: UNEMPLOYMENT.—Offers the only treatment of this subject as a natural phenomenon, subject to natural laws, which is known to the author. Another of the pivotal chapters.

The right to employment; the deficit in employment; efficiency in social hiring-power; the natural economic society; insane economics; purchasing-power and hiring-power; economic walls and wall-builders; the sovereignty of interchange over production; real and imaginary demand; exertion no criterion of economic worth; over-work; concentration of the deficit in employment; arterial and venal economic circulation. *The Basic Law of Employment and Unemployment.* Cherished delusions as to unemployment; competitive wage-system; impotence of the oppressed; quantitative and qualitative unemployment; automatic involuntariness again; character and unemployment; the employer's deficit in purchasing-power for labor; universal economic paradox; life, labor and hope, all charged all the profits will bear; the ''starvation-wage''; the ''submerged tenth''; basis for true optimism; basic economic contrast again; the manufacture of ethics; function of credit in employment and unemployment; statistics of unemployment; natural gravitation in unemployment; true nature of ''surplus labor''; automatic involuntariness again; unemployment in the commercial world; unemployment in trades-unions; recent history of unemployment the ''silent panic'' of 1913-1914; unemployment and seasonable trades; deficit in employment indubitable; inanimate unemployment; economic paradoxes again; intellectual responsibility and patriotism; unemployment not due to surplus labor, nor to labor-saving machinery; modern rights of man; technique of the energetics of unemployment; social energetics; relativity.

CHAPTER XXI: PANICS AND CRISES.—Chiefly historical and statistical.

The economic barometer; inevitable fate of any cumulative expansion; historical; maximum periods of commercial failures; bank-failures; railway-receiverships; fractional versus fundamental crises; gradual disappearance of currency-weakness as a source of panic, with simultaneous rise of high prices as irritant; stocks and bonds; the ''Silent Crisis'' of 1914; the modern economic detonator—high prices due to growing cost of commercialism.

CHAPTER XXII: MISCELLANY.—Touches a series of high spots in current economic progress.

Capital and labor; strikes and lockouts; the minimum wage. Automatic social involuntariness. Congestion in cities; rapid transit a creator, rather than a cure, of congestion; history of New York's rapid transit. Incomes. The census. Public ownership.

CHAPTER XXIII: THE EVOLUTION OF AMERICAN CIVIC CONSCIOUSNESS.—A historical review of the larger aspects of American public opinion.

Ethics in 1850; the rise of the slavery-issue; Northern indifference to it; slavery as a big business; its menace to the Union effective where its cruelty failed to impress; reconstruction; the tariff; the mugwumps; rising influence of conscious commercialism; organization of both capitalism and labor; our attitude toward the impending conflict parallel with that toward the slavery-issue—a topic resumed near the end of the Mezzanine Chapter.

MEZZANINE CHAPTER: THE AUTHOR'S POINT OF VIEW.—Written in response to the wave of anti-radical hysteria which swept this land during 1919 and 1920.

History of the central idea of this book; Edward Bellamy; the rise of economic issues out of the academic into vital importance; the author's genealogy; his loyalty to American political ideals; contrast between our political democracy and our economic oligarchy; domination of the former by the latter; reform versus revolution; the nucleus of our social cancer; surgery requisite for its cure. Parallel between political and economic liberty; the slight power of social will; social prediction; Abraham Lincoln and negro-slavery; Buchanan and Harding; treason versus loyalty to civilization.

CHAPTER XXIV: THE REMEDY—CONSUMERISM AND CONSUMERATION.—Outlines the field in which alone permanent reform can be found. Sets up a competent reply to socialism.

Dominant forces; economic democracy; consumerism; socialism; the Intercollegiates; American socialism; consumerism versus socialism; automatic social involuntariness again; class-consciousness; consumeration; jewishness; economic reform; public ownership; fluidity of economic causes and effects; confiscation of property.

CHAPTER XXV: THE PATH BEFORE US.—Adds the author's personal recommendations to the virtually impersonal chapters which have preceded.

''Organize as Ultimate Consumers!'' The pivotal fact of the immediate future; the detonator of social high explosives. Education as to the truth a vital necessity; futility of inadequate reform; free speech in college and press; liberation of the press from domination by advertising; advertisements mixed with reading-matter; modern town-meeting; self-supporting advertising. The universities. French Revolution in a nutshell. Inspection of the social structure against flaws; function and responsibility of our schools of sociology; ''social control''; intellectual poltroonery. *Does social control exist?* The supreme value of candor; university-militarism; modern patriotism; greatest question of the day; recent social evolution; ''over the top'' in social reform; true optimism; modern Christianity and social reform.

DIAGRAMS

FIG. PAGE
1.—Growth of Credit-Securities 110
2.—General Trend of Wages 444
3.—Decline in National Economic Efficiency 475
4.—America's Lost Opportunity 477

STATISTICAL TABLES

TABLE PAGE
1.—Cotton Raised per Capita per Annum: 1790-1915 10
2.—River-Steamboats Built: 1815-1915 13
3.—Foreign and Great Lakes Tonnage: 1800-1915 14
4.—Imports and Exports, including Gold and Silver: 1790-1912 15
5.—Railway-Facilities in the United States: 1830-1914 20
6.—Relative Growth of Railway-Mileage and Locomotive-Power: 1904-1915 22
7.—Growth of Insurance: 1879-1913 89
8.—Finance and Credit: 1865-1915 111
9.—Banks and their Resources: 1896-1916 112
10.—Insurance per Capita: 1850-1914 115
11.—Credit-Bases and Price-Indexes: 1865-1915 123
12.—Charity versus Commercialism: 1877-1918 341
13.—Population and its Density: 1790-1910 359
14.—The Nation's Broad Classes of Vocation: 1820-1910 360
15.—Occupations in Prussia: 1843-1895 361
16.—Growth of Cities in Number: 1850-1910 362
17.—Distribution of Urban Population: 1850-1910 364
18.—Average Size of City: 1850-1910 365
19.—Relative Per Cent of Urban Population in Each Class of City: 1850-1910 365
20.—Food-Supply from Farms: 1840-1915 374
21.—Stock on Farms and Ranches: 1880-1915 375
22.—Growth of Farms: 1850-1910 375
23.—Meat-Supply per Capita per Annum: 1880-1910 376
24.—Increase in Supply of Mechanical Raw Materials per Capita per Annum: 1820-1915 385
25.—Women in Industry: 1870-1910 387
26.—Classification of Occupations 390
27.—Total and Productive Occupations: 1850-1910 392

TABLE PAGE
28.—Commercially Combative Occupations: 1850-1910............ 396
29.—Various Totals of Classified Occupations: 1850-1910......... 404
30.—Electric Central Power Stations: 1902-1912................. 421
31.—Relative Growths: 1850-1910.............................. 432
32.—Relative Growths: 1870-1910.............................. 433
33.—Wages in Europe and America: 1890-1907.................. 444
34.—Maxima and Minima of Wages: 1770-1914................. 445
35.—Wage-Coefficients: 1850-1914.............................. 446
36.—Wages: Average per Annum: 1850-1914..................... 447
37.—Wages according to Dr. Spahr: 1890....................... 448
38.—Salaries per Annum: 1890-1914........................... 449
39.—Wage and Salary Coefficients: 1850-1914.................. 451
40.—Aggregate Wages and Salaries: 1850-1920................. 454
41.—Percentages of Total: 1850-1910.......................... 456
42.—Aggregate Wealth per Capita: 1850-1920.................. 465
43.—Relative Rates of Growth of Wealth: 1880-1920............. 466
44.—Commercial Dissipation of Economic Energy: 1850-1920...... 468
45.—The Expansion of Commercialism: 1850-1920................ 469
46.—Expansion of Commercialism (Author's Estimate)........... 474
47.—Relative Growths (Author's Estimate).................... 474
48.—Increase in Material Basis for Enjoyment: 1850-1910........ 478
49.—Growth of Invention: 1840-1915........................... 487
50.—Growth of Communication: 1800-1915...................... 489
51.—Growth of Periodical Literature: 1790-1910................ 496
52.—Periodicals: Classes thereof: 1790-1910.................... 497
53.—Growth of Advertising in Periodicals: 1863-1910............ 498
54.—Increase in Advertising-Space in Newspapers: 1880-1916..... 500
55.—Growth of Advertising in New York *Times:* 1896-1916....... 502
56.—Manufacture in terms of Population: 1850-1910............. 507
57.—Manufacture: Relative Tendencies: 1850-1910............... 508
58.—Number of Business-concerns per Capita: 1881-1916.......... 511
59.—Relative Rates of Growth in Manufacture: 1850-1910......... 515
60.—Agricultural Implements: 1870-1910....................... 516
61.—Manufacture: Particular Industries: 1860-1910.............. 518
62.—Relative Variation in Prices: 1841-1884.................... 525
63.—Relative Variation in Wages and Prices: 1800-1915.......... 527
64.—The Internal Factors in Price-Determination................ 529
65.—Variation in English Prices: 1050-1800.................... 540
66.—Wars and Revolutions: 1850-1914......................... 559
66a.—Relative Cost of War, per Capita......................... 567
67.—Proportion of Public Revenue and Taxes to the Ultimate Consumer's Total Expenditure: 1915....................... 576
68.—Relative Unemployment: 1890-1900........................ 624
69.—Unemployment in Trades-Unions: 1897-1911................ 626
70.—Unemployment in New York City and Vicinity: 1914-1915.... 629
71.—Unemployment and Seasonable Trades: 1915................ 630
72.—Commercial Failures: 1857-1916........................... 659
73.—Maximum Periods of Commercial Failure.................... 660
74.—Bank-Failures: 1865-1916................................ 661

TABLE PAGE
75.—New York City Bank-Clearings: 1854-1916.................. 662
76.—Railway-Receiverships: 1876-1916.......................... 664
77.—Stocks and Bonds: Volume of Sales: 1892-1916.............. 666
78.—Maxima and Minima in Stock-Prices: 1911-1917............. 668
79.—Growth of Strikes and Lockouts: 1881-1905................. 676
80.—Growth of Elevated-Railway Traffic: 1872-1877............. 685
81.—Growth of New York's Transit-Facilities: 1872-1916........ 689

MODERN ECONOMIC TENDENCIES

PART I

THE BACKGROUND

CHAPTER I

THE APPROACH

> *"If there exists a science of predicting, of directing or of accelerating the progress of the human race, the history of its past should be the first foundation therefor."*
>
> CONDORCET, "Progrès de l'esprit humain," 1793.

The Diseases of Nations.—Since the opening of the Great War it must have become plain, if never before, that the menace of death and misery which hangs always over the heads of the human race is not primarily due to disease or accident. In spite of our scientific conquests over mountain, sea and air, our victories of microbe and serum, we are yet forced to admit the presence of another unbeaten adversary to happiness than topography or disease—that of social or political upheaval.

When it comes to a comparison of relative sources of death-rate, or of magnitudes of human misery, then disease must take a back-seat in favor of war or revolution. Whether we consider disfiguring small-pox, the "white plague" of tuberculosis, insidious typhoid or racking cancer, of all the fields of pathological science needing attention most urgently, that of the *diseases of nations* must surely come first.

In this field, as in other departments of biology, we find at work two distinct sorts of enemy to health and happiness. There is first the assault from without—the ruthless invader of our domain with piercing, maiming violence. There is also the organic or microbic internal disease—the internal development of a poisoning microbe, bringing on an automatic convulsion in life's efforts to readjust itself into harmony with this novel demand upon its vitalities.

It is impossible to say that either of these is worse than the other. Often each co-operates with the other. In the present Great War, for instance, both are at work, side by side. Each of the belligerents has had to maintain combat with dissension at home as strenuously as with the enemy outside its borders. Indeed, in the final fate of the struggle there is every promise that, in all lands, the former may be a factor overshadowing the latter. Of the problems which promise to loom large and menacing after the war there is none so threatening as this of internal economic strife.

It is with the purpose of laying a foundation for future peace and stability, at home as well as abroad, therefore, that this review of recent American progress has been undertaken. To accomplish this our analysis must be both penetratingly analytical and boldly synthetic. No superficial glance at what everybody knows, nor any parrot's repetition of worn-out formulæ will suffice.

Henceforth, we hope, the price of peace is to be one of mere intellectual vigilance and daring, rather than of bodily sacrifice. There is little evidence that we are now, or ever have been, in danger through physical cowardice; but our civilization is already a-tremble through intellectual timidity. If we are not to be taken by surprise, too late for remedy, by an uncontrollable crash of unexpected events, we must promptly acquire new, bold, drastic and adequate ideas, competent to meet the impending crisis.

Yet one must begin at the beginning. In order to start aright we must first summarize some more or less superficial and obvious facts which may be familiar to many.

The astounding changes which have occurred visibly during the last century are a trite subject for eloquence. Between the America of 1815 and that of 1915 the contrasts are so spectacular that the frequent attempts to portray them have become melodramatic. Nevertheless there exists a real, even a dire, need for a more penetrative analysis of this mushroom-like growth of society than has yet been made; for it is now more than suspected by serious minds that modern society, like a too rapidly grown mushroom, may yet embody beneath all its glory of outward coloring some subtle hidden poisons.

Obviously modern civilization is not breeding happiness in proportion with its outward display. The contentment and stability of mankind is not commensurate with its technical intelligence. Wisdom lags far behind knowledge. War or revolution bursts forth too frequently and unexpectedly. The quieter and less dramatic, but often far more tragic, tides of daily misery and discontent, rising as in a vast worldwide sea, upon the surface of which wars disport themselves as porpoises at play, warns us even more urgently of the need for careful thought.

Early Economics.—The aspect of this land about a century ago, barely beyond the span of some lives still hale, forms a contrast with to-day such as the young of the present generation can scarcely grasp. Then the chief occupations of this now great, rich and most intricately diversified industrial and technical nation might be listed upon the fingers of one hand, namely: (1) Fisheries; (2) Ship-building and navigation; (3) Agriculture; (4) Lumbering, and (5) Hunting.

For the eastern mountains still supplied furs in quantity. Salem (Mass.) was still a chief seaport, overtopping Boston and rivaling New York. Ohio was an Indian frontier. Pennsylvania was still a purely agricultural state, its vast mineral resources only barely suspected. Although coal and iron had been mined in small quantities since before the Revolution, yet the first real cargo of anthracite was shipped down the Schuylkill only in 1804, while the real era of anthracite did not begin until about 1840.[1]

Communication.—In industrial lines New England's waterpowers and mechanical genius were only just budding into life. Transportation and travel, up to about 1810, were confined wholly to horses or sails, often consuming a week from New York to Albany, or ten days to Boston. The news of Washington's death was three weeks in reaching central New England.

Where horse-travel failed to prove more expeditious, the mails were carried in square-rigged sailing-vessels—usually of the cumbrous, unseaworthy and now obsolete brig-rig—beating laboriously up and down the narrow waters of Long Island Sound, or skirting precariously the unlighted coast. While by eighteen-ten or fifteen this torpidity of transit had been much enlivened along the coast by the early steamboats, yet the interior had not yet dreamed of anything better than horses, and usually even these could be used only for riding or packing; for roads fit for wheeled vehicles were few and very poor. The advent of the railroad was then as far ahead in the future as the Cuban War is now behind us of to-day.

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[1] Bogart, "Economic History of the United States," 1912.

Travel was then a nightmare of labor and discomfort, according to present standards. Cooped up in the tiny cabins of sloops, or jolted from dawn until dark in crude stage-coaches over unspeakable roads, with still less mentionable taverns the only havens of rest, the day's program of the traveler of 1815 sounds more like the diary of a modern war-correspondent or arctic explorer than it does like anything a part of civilized life. Physical comfort—or rather, modern sensitiveness to the slightest discomfort—was then unknown. The common lot of man in those days was serf-like toil, a bill of fare meager in variety if plenteous in volume, occasional famine, and a Puritan sabbath for all except those who dared openly to defy public opinion.[2]

Population and Productivity.—Should the reader carry with him any taint of the commonly prevalent error that modern stress of life arises from too great population, dividing up too finely the opportunity for each, a mere glance at the good year 1815 will suffice to dissuade him. With all the resources of a rich virgin continent then wide open to a sparse population, with a form of government then farther in advance of anything known in Europe than is true to-day, and with a frank nakedness of any hampering tradition or caste, life then was, nevertheless, a dire struggle with hunger, cold, disease and poverty. It was habitually pursued, even by well-to-do people, through a length of working-day well exceeding that of most modern factories.

The striking contrast with to-day was that then life was free and certain—independent of one's neighbor except by accident. Odious contrasts in wealth were few and slight. Discontent might free itself in an active search for a better chance. Happiness was apparently rife.

The problems of 1815 were physical and personal ones, as those of 1915 are economic and organizational. Just as our forefathers stood face to face with a stark, untamed wilderness of savage forest, so we to-day face a similar wilderness of myriads of unknown, unorganized fellowmen.

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[2] For a graphic description of these good old times read the diary of an educated New England girl's trip from Connecticut to Ohio in 1810, in the *Atlantic Monthly* for September, 1912; or see Bogart and Thompson's "Readings in Economic History," 1916.

But already this cheery contentment of 1815 with unremitting toil and pioneer hardship was rifted by the lure of more facile ways. The men of that day marveled as much at its wonderful novelties and achievements, its glorious advances in speed, power, comfort and solidarity over previous times, as we do to-day over our palatial cars and ships, our airplanes, wireless telegraphy and gasolinic warfare. The period of the birth of our land as an independent nation happened also to be one of phenomenal progress in the mechanic arts, on both sides of the Atlantic. It was in 1781, the year peace was declared with England, that James Watt first made the steam-engine—which had been in use for pumping water since 1700—available for the task of *rotating machinery.* It was in 1783-4 that Henry Cort advanced the iron-industry by two huge strides at once, by the introduction of his puddling-forge for making wrought iron, and by the use of grooved rolls for forming bars of various shapes.

In the textile industries Arkwright's spinning-frame had been in use since 1760, but its full value first became available with the introduction of Cartwright's power-loom in 1790, and with the later development of rotative steam-power and water-power. In 1791 New England had built its first cotton-mill, and by 1804 there were fourteen in operation there. In 1793-5 Eli Whitney, of New Haven, invented his cotton-gin. About 1805 Oliver Evans, of Philadelphia, introduced the practice of using "high-pressure" or non-condensing steam-power, as an improvement over the more cumbrous condensing type which the prestige of Watt had mistakenly kept in use in England—a step in advance in practical steam-engineering which for over half a century was of the greatest advantage to America, in the conquest of her wilderness and the development of her industries.

Invention and Politics.—The history of America cannot be understood without a comprehension of this remarkable coincidence—if indeed it were such—whereby the American continent was liberated politically at virtually the instant when man's inventive powers were freed to a degree never before recorded in history, and his muscles thus equipped with mechanical aids adequate to the invasion of the wilderness. All of the conditions for a brilliant expansion of industry lay ready.

They were soon to bear rich fruit; but not by use in the way then honored by tradition. Man could not employ these new tools in his individual capacity, in isolated efforts, as he had those of earlier times. The value of these recent acquisitions must remain largely potential only, until their powers might be released by the organization of men into unitary economic bodies, each formed of many individuals.

Transportation.—But this, in turn, might not be accomplished without much better means for *transportation and communication.* These factors were fated, indeed, to bear cogent influence upon the political as well as the economic destinies of the nation. It was the steadily improving means for internal communication between the colonies, really initiated and enforced by the needs of the French and Indian War, which had much to do with precipitating the Revolution of 1776. It was only as the colonies approached physical unity, through roadmaking, that they acquired that sense of political unity and power which, weak and jealous though it might be, yet made independence of England a possibility.

Previous to 1750 there were virtually no wagon-roads in America. Transportation of bulky commodities was possible only by sea; and by sea, piracy united with small ships and lack of charts and lighthouses to make the risk great. On land people traveled on horseback, or very commonly afoot.

In Europe the eighteenth century was a period of building coach-roads, but in America this policy was copied somewhat tardily—to be accelerated later, when the mistake had been recognized. The colonies were mutually jealous, and unconscious of their common interest in economic reciprocity. Intercolonial trade was not encouraged at home, and was actively repressed by England. Local war frequently threatened. It was only after the year 1800, following more than a dozen years of political independence and free interstate commerce, that stage-routes became continuous from Boston to Charleston, or penetrated as far west as Pittsburgh.[3]

As late as 1825 reliance was still shown to be upon communication by water, in the building of the Erie and the Chesa-

[3] Bogart.

peake & Ohio canals. This was possibly aided by the fact that it was only at this date that the first wagon with springs appeared. As late as the Centennial of our Independence the term "spring-wagon" was still in common use throughout the Middle West, as indicating a wagon distinctive from the usual sort. It was as late as 1838 that the federal government completed its "National" turnpike, or "Cumberland Road," begun in 1806, across Maryland, Virginia, Ohio, Indiana and Illinois to the Mississippi—an institution familiar to every American who has happened to grow up near its route, but unknown or forgotten by all the rest.

Yet amelioration of this situation was potentially at hand at a very early date. As far back as 1786 John Fitch had actually driven a boat by steam on the Delaware River, and Symmington and Miller had done the same thing in England in 1788; but it was not until 1807 that Fulton achieved the first success of immediate practical value, on the Hudson—more by reason of a general advance in public intelligence and the arts, and in urgent demand for speed and certainty in transportation, than by superiority of mechanical genius.

Quickly thereafter the steamboat crept into a position of importance in American life. The Hudson became the greatest of all highways into the interior. The main route to the West was shifted from the Ohio river to Lake Erie. Steamboats from New York through Long Island Sound made Fall River, at the head of Narragansett Bay, forty miles from Boston, in little more than a day, cutting the earlier trip of a week or ten days of torture by stage-coach down to two nights out. The Perth-Amboy water-route to Philadelphia, now forgotten, replaced by boat some forty miles out of ninety by stage, and within a few years steam was making the longer outside trips to the Chesapeake and even challenging Cape Hatteras.

Progress.—We have little to show to-day which can compare with such marvelous advances as these in bringing distant communities into prompt touch with each other. It is not that we have not improved inconceivably over these methods of a century ago, but that our last dozen years have shown, with the doubtful exception of aviation, nothing like the rate of advance in speed and volume of communication between man and man that theirs did.

For it is difficult—nay, impossible—for the younger generation of to-day to comprehend the isolation of community from community which underlay the political life and the ethical institutions of the days of Washington, Franklin, Adams, Jefferson and Hamilton. That they, working from such meager instances of solidarity of population as then prevailed, should have been able to enunciate political principles so pure and exalted, is as much a marvel as is the now common idea that those principles (unless interpreted far outside their original form and intent) should suffice for the gigantic extent and intense, intricate solidification, of modern populations.

Cotton and Carriage.—From the opening decade of the nineteenth century the history of American economics and politics centers chiefly about two industries: (1) Cotton-growing in the South and cotton-weaving in the North, and (2) transportation, both North and South. While the North, of course, possessed a greater variety of industry than the South, yet even there these two industries wielded prime influence. They advanced hand in hand. Both of them bore directly upon the approach of the Civil War.

The prime influence of internal and oversea transportation in promoting the cultivation of cotton is visible both in the gross statistics and in the local distribution of this industry. In the first years of our national history little is known as to our production of cotton. Even the records of export to England are untrustworthy, because of the frequent transshipment from our seaports of cotton grown in the West Indies. But it is reasonably sure that exportation of cotton began only in 1787, increasing thereafter to thirty times as much in 1793. The figures as to later growth are tabulated below.

As to the distribution of cotton-culture, Bogart says:

> "At the time of Whitney's invention [of the cotton-gin, in 1795] cotton was raised only in Georgia and South Carolina; thence it spread to North Carolina and Virginia during the early years of the nineteenth century, but for more than twenty years it was confined to the Atlantic seaboard. By 1811 a beginning had been made in Tennessee and Louisiana, but together they produced but one-sixteenth of the cotton raised in the United States. . . . By 1821 these four States [Tennessee, Alabama, Mississippi and Louisiana] raised one-third, by 1831 nearly one-half, and by 1834 over two-thirds of the cotton grown in the United States."

But it is not appreciably by reason of soil, nor by mere parallelism with the western spread of settlement, that these States became pre-eminent in cotton-culture. It is because they are pre-eminently the States of cheap internal *transportation.*

A commodity like cotton, bulky in form and limited to one short season, cannot well support railroads. These must be supplied with traffic fairly evenly the year around, in order to pay interest upon investment in track and other plant. Nor is it practicable to carry cotton far by wagon. But the many sluggish rivers of the South, with their cheaply built, light-draft steamboats, burning cordwood for fuel, formed ideal highways for the shipment of the annual crop to the seaboard without incurring burdensome charges during the idle season.

Although Fulton's first success was attained on the Hudson in 1807, it was not until 1811 that Nicholas Roosevelt took the first steamboat down the Ohio and Mississippi, from Pittsburgh to New Orleans and return;[4] and this is just the year when, according to Bogart, a "beginning" in cotton-culture had been made in the interior States. For the rivers had afforded meager means of transportation, enough to start the industry, before steam came to the aid of the flatboatmen. In 1820 (also according to Bogart) it took only ten days for the full length of these rivers going down, and thirty-five days coming up; and during this interim of nine years the cotton-culture of these interior States had grown eightfold. Savannah, Mobile and New Orleans were seaports early shipping large quantities of cotton to New and Old England, and they were fed chiefly by their river-traffic.

Railroads were being built throughout the South, it is true, during the decades following the start in this line, and they accentuated the growth due to river-navigation. The first steam passenger-railroad in America was built in South Carolina in 1830. But up to the time of the Civil War the influence of the railroads was much less marked than that of the rivers.

Thus river-travel grew rapidly into a great institution, creating as it went a new school of marine architecture and engineering which has since been copied in all the continents. It was then surrounded by a halo of prosperity, racing, gambling, romance and risk of boiler-explosion or conflagration which forms one of the most picturesque and tragic of all aspects of our early history. Unfortunately, no reliable statistics remain as to the aggregate of this river-tonnage during the early decades.

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[4] Thurston, "Growth of the Steam-engine."

TABLE 1

Pounds of Cotton Raised, per Inhabitant per Annum, 1790–1915
Averaged for Periods of about Five Years Each. For the United States

1790......	3.8	1832–36..	28.7	1862–66..	16.9	1892–96..	55.6
1795.....	9	1837–41..	36.9	1867–71..	32.0	1897–01..	68.8
1800.....	6.6	1842–46..	43.4	1872–76 .	39.9	1902–06..	69.1
1805–09..	12.2	1847–51..	44.7	1877–81..	48.3	1907–11..	67.4
1810–25..	....	1852–56..	48.7	1882–86..	51.3	1912–15..	70.2
1826–31..	22.3	1857–61..	57.1	1887–91..	59.4		

The steady growth in rate of cotton-raising per capita, except where interrupted by the Civil War, will be seen at a glance from Table 1. It is stated in pounds of cotton raised per annum per capita of the entire United States—not as a measure of individual productivity in the States growing cotton, but as one of average individual supply throughout the entire nation.

Per-Capita Data.—For it is the prime purpose of this work to investigate the facts bearing upon *the average welfare of each individual citizen;* and for this purpose the first requisite is knowledge as to the average supply of the material means for life and comfort *per individual* throughout our entire territory—which is constituted a single economic unit by its internal free trade—and throughout as much of its history as can be brought under exact analysis. For population is growing so rapidly that gross statistics mean little, or may actually mislead. What is needed is a reduction of the vast intricacy of our economic and industrial problems to the simplest possible terms, namely, *each individual's daily life and wants;* and this can be accomplished only with data reduced to a per-capita basis.

Thus the thing of prime importance shown by Table 1 is the virtually steady growth in the supply of cotton to each person, on the average. This has occurred in spite of our phenomenal growth in population, and in spite of the general retreat of agriculture in proportion to the other arts, and of cotton in proportion to other staples. *We each of us now have available for our enjoyment much more cotton than in the palmiest days of "King Cotton" before the Civil War;* but we have ceased to have our lives and institutions vitally affected thereby, because it is no longer the basis of a huge enterprise for the exploitation of cheap slave-labor.

The point of only secondary importance in this striking record of cotton-culture is the marked influence upon it of power-ginning, of steam-transportation and of steam-driven textile machinery. The cotton-gin, appearing in 1793-5, the steamboat in 1807-12 and the railroad in the eighteen-thirties, each left its plainly visible mark. Thus at the very beginning of our economic evolution, guiding us irresistibly toward our first great political convulsion due to economic causes, the Civil War, appears that factor which all further study must increasingly emphasize as the prime controlling one in all social development: *transportation and communication.*

For the steam-driven textile machinery of that day could be used profitably only in New or Old England, and chiefly the latter. In this way the importance of transportation became accentuated; for the cotton-mills could be reached cheaply only as ocean-going steam-navigation developed. In 1819 the first transatlantic vessel carrying steam-engines sailed from Savannah to Liverpool and Petrograd; but her paddle-wheels were folding ones, made largely of canvas, and her engines were used only a small portion of the time. Then the coal-consumption of these early engines was too enormous to permit their continuous use, even had there been no fear for the destruction of the paddles by the waves. Hence the experiment was not a commercial success. It was not until 1837 that transatlantic ships relying continuously upon steam to aid their sail-power came into use, under the Cunard family, and not until a full half-century later that it was found practicable to dispense entirely with sails.

Canals.—Another immediate effect of the steamboat was the stimulation of canal-building, which had been a practical art since 1767, at latest. This was done not so much in the hope of using steamboats directly upon the canals, although this was considered, but because the traffic made available by the river and coastwise steamboats demanded better means for interior transportation than the wagon; for the railroad was not introduced until after 1830, and even then was expensive to build, in terms of its limited tonnage-capacity. The landmarks of this form of progress are the opening of the Erie Canal

(1817-25) at a first cost of over ten millions, the completion of such trunk-canals as the Ohio & Erie and the Miami Canals, in Ohio, joining Lake Erie with the Ohio River, in 1830-32, and the Chesapeake & Ohio Canal, opened in 1839, giving another route across the mountains to the Middle West.

For twenty years after the railroad became generally adopted a large portion of all rail-traffic was carried, over sections of the route, by canal. There were no through rail-routes until after the Civil War. Between the Susquehanna River and Pittsburgh the only portion of what is now the trunk-line of the Pennsylvania Railroad was the cable-hauled inclined-plane railway over the summit of the mountains; the rest was all canal. The traveler of to-day may still see from his dining-car window remnants of the canals on which his grandfather of 1850, when traveling nominally by rail, must have spent days and nights in a canal-boat to cover what the grandson now passes in as many hours.

As late as 1854 the total length of canals in operation was almost one-third of that of the railroads. Canal-traffic did not decline to the point of open surrender to the railroads until the time of the Civil War—that great stimulator of so many changes in our industrial and financial ways.

Indeed, for passenger-service, the canals were far more comfortable than the early railroads, while their greater cheapness for bulky commodities was obvious. It was in speed alone that they failed. The pictures which have come down to us of summer travel by canal, with the passengers seated in groups in comfortable chairs on the broad decks, enjoying the quiet country beauty all around, suggest a pang of regret even in comparison with the palatial comforts amidst which we are hurled through the land by the modern railroad, too rapidly to see it. In comparison with the inconceivably rough and dirty service of the early railroads, with the chance of a "snake-header" end of a loose rail coming up through the floor of the car at any moment, to maim or kill, in addition to the frequent collisions and horrible burnings of wrecks, canal-travel must have been a thing very hard for our forefathers to relinquish for the sake of speed.

Western River-traffic.—As to traffic on our western rivers no exact data are available, nor as to total tonnage in commission; but the tonnage built each year is known. It is stated in

Table 2, in which all but the first item are averages for five-year periods. All columns of Table 2, except the last, refer to the Mississippi River alone. The last column includes its tributaries. From these figures it becomes plain that western-river steamboat-building fell from its maximum before the war, as a result of railroad-competition, and not as a result of the war itself. It is also noticeable that the war brought no immediate paralysis of steamboat-building; but much of the new tonnage must have been used for military purposes.

TABLE 2

River-steamboats Built per Million Inhabitants, 1815–1915

Mississippi River.								All Western Rivers.
Year.	Tons.	Year.	Tons.	Year.	Tons.	Year.	Tons.	
1815	128	1836–40	890	1861–65	916	1886–90	181	...
1816–20	275	1841–45	926	1866–70	768	1891–95	155	...
1821–25	190	1846–50	1133	1871–75	609	1896–00	161	214
1826–30	445	1851–55	1250	1876–80	520	1901–05	106	151
1831–35	506	1856–60	990	1881–85	361	1906–10	54	71
						1911–15	...	68

Lake and Ocean Shipping.—The country's growth in shipping on the ocean and the Great Lakes proceeded as stated in Table 3. The first steamboat of the Great Lakes was launched in 1816 (Thurston).

The noticeable features in Table 3 are the continuous and marked decline in our foreign shipping under the American flag (until stimulated by the Great War of 1914), the virtual constancy of our coastwise and fishing fleets per capita, and the tremendous increase in internal shipping on the Great Lakes. The momentary drop in the fourth column between 1870 and 1880 is due merely to a change in the classification. It is also to be noted that the actual growth on the Great Lakes is not so large as that indicated, because an increasing portion of the tonnage of recent years has been in coal and iron-ore, cargoes which figure tonnage per dollar of value far beyond the average for general merchandise.

TABLE 3

FOREIGN, COASTWISE AND GREAT-LAKE SHIPPING

Tonnage per Ten Thousand Inhabitants, 1800–1915

Year.	Foreign Trade and Whaling.	Coastwise Trade and Fishing.	Great Lakes.	Through Sault Ste. Marie Canal.[5]
1800	1263	569	.....	.....
1810	1341	608	.....	....
1820	643	685	3.6	.....
1830	448	477	8.6	.....
1840	527	750	31.8	.....
1850	684	841	85.4	.....
1860	810	892	148	12.8
1870	393	708	177	17.9
1880	270	551	132	34.6
1890	150	552	169	134
1900	108	568	205	292
1910	86	730	315	542
1915	185	645	279	558

[5] This column gives tonnage passing; all other columns tonnage afloat.

American Merchant Marine.—In view of the widespread editorial and stump-speech complaint over the decline of our ocean-carrying trade under the American flag, with agitation for the governmental subsidy of American-registry shipping—a topic sure to revive with renewed virulence after the war—it is particularly to be noted that the second column of Table 3 bears no visible relation to the evolution of our foreign trade. This last has increased fairly steadily per capita, however it may have been carried in foreign ships.

To throw light upon this matter Table 4 gives the figures as to our total imports and exports, including gold and silver, with the excess of either imports or exports stated as a percentage of the whole afterwards. Unfortunately these data appear in terms of dollars of valuation, instead of in mass of commodities, which breaks the rule for this book; but this is inevitable in this case.

All figures in Table 4 except the first and the last state the average for the decade extending on either side of the year stated. The first figure gives the average for the years 1790-95 and the last that for 1906-12.

If "the disappearance of our flag from the seas" has had any detrimental influence upon the volume or direction of our foreign trade per capita, it is certainly not apparent from the statistics. Taking the figures as they stand, the lowest for the 122 years is that for 1840. *But this is just the time when the American clipper-ship reached the very zenith of its prosperity, when the American flag floated most prominently and commanded relatively the highest rates in the most distant ports!*

TABLE 4

Total Imports and Exports (Including Gold and Silver) with Excess Percentages, 1790–1912

(Dollars per Capita per Annum)

Year.	Imports.		Year.	Imports.		Year.	Exports.	
1790	$16.30	13.5%	1830	$14.50	7.7%	1880	$27.90	10.6%
1800	29.50	8.8	1840	13.90	3.7	1890	27.10	6.0
1810	17.80	16.3	1850	17.10	1.7	1900	31.10	19.5
1820	17.80	7.8	1860	19.20	0.3	1910	39.20	13.0
			1870	26.00	2.4			

Conversely, the highest figure is that for 1910, when American registry, as shown by Table 3, was almost at its lowest ebb. *Yet the volume of trade* (*per capita*) *for that decade is almost three times that for 1840.*

Moreover, the balance of trade during that entire period drifted markedly toward that side of the ledger which economists generally regard as in our favor. In recent decades the large excess of imports over exports which prevailed at the time of our national birth has been reversed, during the very period when our flag was gradually disappearing from the seas, into an equally large excess of exports over imports!

In reality the figures may not be taken quite as they stand, for they record only valuations, and hence need interpretation in terms of the general scale of prices prevailing at each period stated; but this will alter merely the degree, and not the nature, of the deductions enforced. The contrast of Table 4 will still show that our foreign commerce per capita has increased fairly continuously with time, as the several continents became more and more closely united by the steamship, the cable and the wireless, and quite independently of what flag might fly above the carriers.

The reasons for the decline of American registry are simple and natural, and have nothing to do with our economic prosperity, either internal and external. These reasons are quite in parallel with our economic development in other industries than ocean-carrying. They are these:

In the old days of sails, speed, which was and is the prime factor in determining both costs and profits, *depended primarily upon the skill of the skipper.* Merchant-navigation was then much like a modern yacht-race. In those days the sailor who knew how to crack on sail, night as well as day, without losing a lot of costly top-hamper to every squall which blew in out of the darkness, could make the long voyages in much less time than others. Sail must be carried to the last possible moment; and a proverb among mariners runs to the effect that "any lubber can spread canvas, but it takes a sailor to shorten sail." In the China-trade of clipper-days American bottoms often commanded twice the freight-rates, in competition with other nationalities, just because of the combination of skill, daring and alert good judgment typical of American commanders, in seas almost devoid of aids to navigation.

Therefore in those days navigation was justly and naturally a profession of prominence and honor. The young men of the best families officered and part-owned our merchant marine. But they almost universally retired from so arduous a vocation before the age of forty. In colonial days at least one instance is reported of a ship sailing the twenty-months' voyage to the China seas *with every officer on board still in his teens.*

The whole thing was an adventurous gamble—against weather, uncharted seas, pirates, and fluctuating and unknown markets; but a gamble in which skill and courage played a large part. Both profits and losses were commensurate with those customary in Wall Street to-day. A cargo of pepper landed at Salem in the eighteenth century is said to have netted a profit equal to four times the entire cost of the ship and the voyage.

But now all this has been changed. The speed of a modern steam-freighter has been determined for her beforehand by her designers. Neglect or stupidity in the engine-room can spoil it, of course; but skill on the bridge cannot mend it. Navigation, as a profession, has been reduced to computing observations by rule of thumb, and counting engine-revolutions from one to another of the lighthouses and light-ships which dot our shores and coastal waters like lamp-posts on a street. All distinctive honor and appreciable profit have passed out of the hands of the commander.

Competition now succeeds or fails in the offices ashore, not on the high seas. The profit goes to the owner having skillful commercial judgment and alertness in watching a market reported hourly to him from Argentina to Manchuria, rather than to anyone possessing mere nautical efficiency.

Whether the ship be sailed under domestic or foreign flag is little more than empty sentiment. It has nothing to do with our supply of carriers. Our ports will always be filled with all the bottoms for which cargos are offered. The unusual demand for ships occasioned by the present war has brought into New York harbor flags from South America and Asia which were all but strangers to the most experienced marine authorities. The profits made in using them will go to the owners—or to those clever enough to control them temporarily, through charter—whatever the flag flown. Conversely, if the ship be owned abroad the profits will go abroad, in spite of stars and stripes floating above the taffrail.

It is just as natural and inevitable, under modern conditions, that our ships should be officered by middle class Scandinavians as it is that our steel-mills should be manned by Slav laborers and superintended by technical Teutons—while the ownership, control, enterprise and profits all remain in American hands in both cases. Americans are better occupied in the commercial offices at home, it should be plain, than they would be commanding tramp-freighters in the far seas.

Yet, if the navigators and crew be foreign-born, what pride may we take in the fact that our flag is flown? Our satisfaction over our supremacy in international yacht-racing, for instance, needs be tempered by the fact that nearly every winning American boat has been skippered and manned by foreign talent. Only for the design is credit due to us.

Railroads.—The growth of steam-transportation on land has progressed more slowly and with greater difficulty than that by water. Although steam-locomotives came into use for hauling coal wagons (on the same railroads with horses), soon after the appearance of the first practicable steamboat, in 1807, yet it was not until almost 1830 that Stephenson attained his dramatic triumph with the famous "Rocket," and established the railroad, which had long been used for freight, as a thing properly to be operated exclusively by steam, and fit for passenger-traffic.

For it is difficult now for us to realize how gradually the modern combination of fairly level railroad, steam-locomotion and passenger-coaches, now so familiar and universal, came into recognition, *after a long previous history of each as a separate appliance.* Before about 1840 the railroad, as a means merely for aiding the horse-traction of goods-wagons (chiefly for coal or stone), and the steam-locomotive, then regarded as merely a competitor of the horse-drawn stage-coach on ordinary highways, had developed quite independently. In fact, the railroad had developed fairly completely from thirty to forty years ahead of the locomotive. What is said to be the first railroad in America ran from granite-quarries of Quincy, Mass., down to tide water on the Neponset River, and is said to have been in operation (with horses, of course) during the Revolution. Yet no steam-locomotive was in use in Massachusetts until in the eighteen-thirties.

Conversely, the locomotive, when it did appear (which was in England, about 1814) was accepted without question as belonging as much to the highways, to compete there with horses in maintaining the passenger-traffic (which had never dreamed of boarding the slow, rough and dirty railway-coal-cars), as it did on the railroads, where it would be equally obliged to compete with horses. For on the railroads the horses had the right-of-way over locomotives by nearly a half-century of precedence. On the highways they had had only about twice that.

Stephenson's great genius, therefore, lay not in the fact that he "invented" the locomotive, although he added to it features which have formed a part of its success down to the present day; for the locomotive was a pretty widely used machine for a dozen years before he touched it—just as the stationary steam-engine was used all over Europe for sixty years before James Watt, the commonly accredited inventor of it, began his experiments. Stephenson's great achievement was to see that *the railroad and the steam-locomotive belonged together,* each being properly built to suit the other, while horse-drawn individual carriages belonged exclusively on the high-roads.

For at that time the general expectation from steam-power, when applied to land-transportation, had been that it should replace horses in the private carriages of the highways, just as marine steam-power had replaced oars and sails, without other alteration in the industry. And the art had made surprising progress in that direction. It is somewhat startling to one who has taken for granted that the automobile is a product only of the twentieth century to learn that in 1834-5 there were a half-dozen commercial lines of steam-propelled omnibuses running in and about London, extending even so far as Brighton, sixty miles away.

But even Stephenson's mechanical triumph, in his improvements over previous or competing locomotives, did not earn for him an easy or immediate recognition. Both popular prejudice and vested interests fought hard, in Parliament and out. It was not until fully 1840 that the graded railroad, fit for high-speed locomotives drawing long strings of carriages without toothed drivers, first won out in the battle against the traditional belief in the single stage-coach as the natural interurban vehicle, whether propelled by horse or by steam. It was not until late in the eighteen-fifties that the Pennsylvania Railroad had cut out the last of its inclined planes and stretches of canal between Philadelphia and Pittsburgh, running trains right through by means of locomotives, over grades which they could pull without dependence upon cable or rack-and-gear—reducing the time of transit from three or four days in 1835 to less than twenty hours of comparative comfort.

Quoting Bogart:

> "About 1850 Mr. Henry C. Carey wrote: 'Twelve years since the fare from Chicago to New York (1500 miles by lake and rail) was $74.50. It is now but $17.' "

The last twelve years preceding the publication of this present book show no advance in facility of communication at all comparable with this. The development of the automobile and the airplane have been marvelous, but they have not cheapened transportation or communication appreciably, if at all.

Figures as to the growth of our railroad-system in mileage are given in Table 5. As before, we are not interested in the gross mileage, but only in that *per million inhabitants;* for this alone is a true measure of the degree to which people have been aided in living, as the country grew, by increasing access to railway-facilities. The mileage is stated for the median year of the period stated, while the annual rate of increase is averaged over the period.

The figures up to 1892 refer only to main-line track. Those since 1892 include also sidings; and since progress of late has been chiefly in the expansion of terminal facilities, rather than the building of new lines, this is only a fair way to state it.

TABLE 5

RAILWAY-FACILITIES IN THE UNITED STATES, 1830 TO 1914

Period	Mileage per Million Inhabitants	Rate of Increase, Per Cent per Annum	Period	Mileage per Million Inhabitants	Rate of Increase, Per Cent per Annum
1830	3	....	1872–77	1670	4.0
1832–37	73	89.0	1877–82	1860	2.2
1837–42	165	17.7	1882–87	2268	4.1
1842–47	231	7.0	1887–92	2657	3.2
1847–52	389	11.0	1892–97	3352	...[6]
1852–57	673	11.6	1897–02	3390	0.2
1857–62	974	7.7	1902–07	3664	1.6
1862–67	1002	0.6	1907–12	3820	0.8
1867–72	1372	6.5	1912–14	3898	1.0

[6] Change in classification.

These figures show the enormous growth in transportative facilities in use for the support of each individual. The average citizen to-day makes use of, or "consumes," as a part of his daily needs and luxuries, *over two hundred times the amount of transportation,* measured merely in miles of railway-track, as compared with the average citizen during the childhood of men still living. Measured in ton-miles or passenger miles, and including electric-railway and other forms of transportation, the actual contrast is far greater still.

Life and Transportation.—This is the one most significant fact of modern social life, in its mechanical aspect. The fundamental importance of our present reliance upon transportation and communication, to supply daily food, shelter and work for tens of millions who otherwise *never could have been born*—or who, having already been born, must die soon after this transportation is interrupted—cannot be over-emphasized.

Therefore it is absurd to assume that the hundred millions of people now cemented together by our present intensity of communication do not need a form of social organization basically different from the population one-seventh as great, using but one-fiftieth of the modern amount of railway-mileage per individual, of 1832, the earliest year in which the railroad had become a social factor. Still less is it reasonable to expect modern economic conditions to be met by the simple political formulæ of a generation earlier still, when communication was far more crude than in 1832.

Not only is the mileage of track in use significant, but also the widely varying rate at which this mileage has been built, shown also in Table 5. Between this rate and the degree of commercial prosperity prevailing at the time there is a close connection. At the same time, it is only natural to find a continual decrease in this rate of addition to our track-facilities, as the country became properly provided. Our later development has been directed more toward a more intensive use of what track we have. Nevertheless, up to the latest hour concerning which we have data, *we are still increasing our trackage faster than our population.*

Intensity of Railway-traffic.—This increase in intensity of traffic, while it has been active from the beginning, can be traced statistically only during recent years. Of the several means for measuring this growth amongst which selection must be made, the one chosen as the best indicator is the aggregate locomotive heating-surface of the country. Other things being equal, the power of a locomotive is proportional to its heating-surface. Data as to number and size of cars moved would show approximately the same rate of growth, but are not so accurate a measure of traffic as heating-surface. For value as well as weight of freight must be considered, and power includes both items; because the higher priced freight, as a rough rule, is moved with a speed proportional to its value, and speed, as well as weight, calls for power.

TABLE 6

Relative Growth of Railway Mileage and Locomotive Power per Capita, 1904 to 1914

Year	Single-track Mileage	Aggregate Locomotive Heating-surface	Rate of Increase, Per Cent
1904	1000	1000	....
1905	1012	1055	5.5
1906	1026	1165	10.5
1907	1040	1278	9.7
1908	1039	1327	3.9
1909	1046	1328	0.1
1910	1055	1385	4.2
1911	1069	1462	5.6
1912	1073	1501	2.7
1913	1077	1579	5.2
1914	1079	1625	3.0

Table 6 gives the comparative rates of growth in mileage and locomotive-power per capita since 1904. Since relative rather than absolute rates of growth are what interest us here, the figures are all stated in terms of 1000 as the arbitrary standard for the year 1904—except in the case of the last column, which gives ordinary percentages.

Since 1904 the increase in locomotive-power per capita has been eight times that of the mileage per capita. Since the Cuban War the locomotive-power available for the support of each citizen has been virtually doubled.

Railway-accessories.—Returning to the broader aspect of the railroad in its relation to the material growth of the nation, five most important, if not absolutely essential, features had to be added to the railway-system with which the wilderness had been penetrated, up to about 1870, before the great fertile territory of the Middle West—not to mention the mineral treasures of the Rocky Mountains, the lumber of the Sierras and the fruit-supplies made available by irrigation in the valleys of the Pacific coast—could be reached from the Atlantic seaboard in what might be called comparative speed, ease and comfort. These features were:

(1) The sleeping-car;
(2) The air-brake;
(3) The modern coupler and buffer, developed later into the vestibule;
(4) Steam-heat, and
(5) The modern signal-system.

All of these innovations appeared soon after the Civil War, coincidently with the extension of rails across the plains and mountains to the Pacific, in 1869, although the general adoption of steam-heat was slower than the others. Without the modern coupler a parlor or sleeping-car could not have been made appreciably more restful to the passenger than a freight-car. Without the air-brake speeds could never have approached modern figures. Locomotives could easily be built with power enough to draw the trains rapidly, but without prompt and powerful brakes such speeds would insure only disaster. Until steam-heat was adopted the frequent horrible holocausts involved in railway-accidents, from fires started by the "deadly car-stove," were such as are best forgotten. Without modern signal systems the growth in traffic (per mile of track) just noted would have been quite impossible.

Inventional Lag.—But it must not be supposed that the adoption of useful inventions follows always immediately upon the date of their introduction. Their success may be steady, and rapid enough to mark its effect statistically, yet there is much inertia to be overcome. In textile matters, for instance, although the power-loom was introduced in 1790, yet far into the nineteenth century the use of hand-looms still prevailed widely. Bogart, quoting from Webster, says:

> "In 1815, when cotton-cloth was still woven chiefly by hand—the family-weaver finishing only four yards of cloth per day—the price of ordinary cloths for sheeting was 40c. per yard. In 1822 it had fallen to 22c., and in 1829 to 8½c. In 1850, when factory-manufacture had completely abolished the old-time system and when the power-loom was in full operation, the price was reduced to 7c. as the result of machine-labor. That this price was due chiefly to machinery, and not so much to a fall in the price of cotton, is evident

> from a comparison of the prices of cotton and cloth. . . . A mule-spinner of 1830, carrying 300 spindles, could be operated by a single person, who could thus, with the aid of machinery, accomplish as much as 300 girls spinning by hand a single thread at a time on the old-fashioned spinning-wheel."

The same is true of agricultural machinery, a line of invention in which the United States led the world and one which had a vital influence upon the development of our country during the first half of the nineteenth century. When the first cast-iron plow was introduced, in 1797, it was disapproved by the farmers on the score of its "poisoning the soil," and it was not until about 1825 that there arose any general tendency to use improved agricultural implements. In 1834 McCormick brought out his now world-famous reaper, and in 1837 the Pitts brothers their threshing-machine. The decade of 1840-50 witnessed the wide introduction of plows with interchangeable parts, soon to be followed by the use of chilled iron or steel as material.

> "Just before the Civil War a bushel of corn represented more than 270 minutes of human labor, at a cost of 35¾ cents, while to-day (1904) the same amount is produced with 41 minutes of labor for 10½ cents." (Encyclopedia Americana.)

The way in which our path of progress, entered by such strides as these, led on through the intricate and brilliant record of invention which characterized the last half-century must be reviewed briefly. Reference to a few of the principal land-marks will suffice.

Stationary Power.—In the field of stationary power, which, after transportation, is the one most intimately linked with our growth in material prosperity, the first of these land-marks is the invention of the hydraulic turbine, about 1825. This device freed the water-powers of both continents, and particularly those of our own New England states, from the limitations of the old-fashioned overshot or breast wheel—slow, cumbrous, and narrowly limited in its ability to handle high heads or large flows of water.

About the year 1850 appeared the drop-cut-off steam-engine, in the hands of Sickels and Corliss, reducing the intolerable steam-consumption of the earlier engines so that they could be used for many purposes previously impracticable. There are few inventions which have had more permanent value than this, though largely unknown to the public. The development of New England's textile industries depended largely upon it.

Efficiency versus Economy.—Here we should stop a moment to consider one economic effect of these advances. The history of coal-mining, for instance, cannot be understood without knowing that *nothing has so stimulated the gross consumption of coal as these improvements in the fuel-efficiency of the steam-engine.* Each additional economy in the use of fuel, as measured in pounds per horsepower-hour, immediately made steam-power available for a wide range of uses from which it had previously been debarred by its cost for fuel. Therefore the number of horsepower in use rose much more rapidly than the fuel-rate per horsepower fell—resulting in a steady increase in the gross consumption of coal for power.

While this was true of every step in advance in steam-engineering yet it had its most marked instance in marine engineering, because of the multiple value of coal on board ship (as a displacer of cargo), in addition to its original cost. Hence there is no one item in the evolution of technical science which has so increased our drafts upon our coal-fields as the invention of the compound marine engine, which all but halved coal-rates per horsepower.

Nor is there one which did more material good, for all these factors grow with length of voyage. Hence the compound engine was able to propel ships profitably on voyages into far seas where sail alone had been practicable before.

To return to stationary steam-power, on land, about 1875 entered the high-speed automatic steam-engine, offering the user a gain in the way of space and first cost, in both of which items the Corliss engine was extravagant, which paralleled the gain in current fuel-consumption made available by the Corliss. Both types have had a wide field of usefulness, surrendering finally their leadership to the steam-turbine (coupled with the electric generator) during the last years of the nineteenth and the first of the present century.

Gas Power.—In parallel with this development arose the use of the gas-engine. Although the invention of illuminating-gas in 1801, by James Watt's assistant, Murdock, had started by 1825 a steady creation of suggestions on paper for deriving power from gaseous fuel, yet the first commercially practicable machine appeared only in 1860, at the hands of Lenoir, in France. But illuminating-gas, which was first distributed in America in Baltimore in 1816, has always been too costly to serve as a basis for power in appreciable quantities. Up to about 1890 engines driven thus had necessarily been confined to small units for isolated purposes. It was only as the use of "producers" of cheaper fuel-gas of various sorts, in which Dowson was a pioneer, became common, that the gas-engine became an appreciable factor in our material development. The discovery of its usefulness when run upon the waste-gases from the blast-furnace as fuel, in Belgium in 1901, and the wonderful development of gasoline-driven engines for automobiles, motorboats and airplanes since that year, is personally familiar to all adults of to-day.

The Locomotive.—In the application of steam to land transportation there are few milestones to record. The locomotive itself was left in so perfect a state by Stephenson, and by the early American designers who concurrently developed the flexible form of running-gear adapted to our rougher roads and heavier traffic, that throughout the half-century from 1840 to 1890 there was virtually no change except in dimension. Since then the introduction of compounding, superheating and mechanical stoking, with the piston-valves enforced by higher steam-pressures and the radial valve-gears enforced by the crowding of more power within the unyielding track-gage, have permitted a tremendous increase in size and power of machine, with corresponding increase in train-load. But aside from these features, and the introduction of electric traction upon a few lines of relatively congested traffic, or accessible to cheap mountain water-power, the growth of the railroad has been one of dimension only.

The Marine Engine.—In marine propulsion the advances have been more spectacular. The substitution of the screw-propeller for the paddle-wheel by John Ericsson (1845-60) instituted a marked gain in the appearance, sea-worthiness and carrying-capacity of ocean-going steamships. The introduction of the surface-condenser and the compound engine (1860-70) opened up to steam-traffic distant seas hitherto accessible only to slow and uncertain navigation by sail, and insured the decline of prosperity for the world-famous American clipper-ships. This conquest by steam was clinched by the entry of the triple-compound engine, in 1875.

Not even the steam-turbine, invented by De Laval and Parsons in the eighteen-eighties, and which reached recognition in marine propulsion about the year 1900, has yet made so marked an impression upon the character of our ocean-carriers as did these earlier inventions. The turbine has permitted a size and speed of modern passenger-liner which would have been impracticable without it, but has produced no other alteration. For freighters of moderate size the Diesel oil-engine has made some splendid records in low fuel-consumption in voyages of great length, but to date it has not excelled the geared steam-turbine in general advantages.

The Sailing-ship.—Each advance in efficiency or power of engine diminishes further the relative importance of the apparently dwindling fleet of sailing-ships. Yet it is to be noted that the last two decades have witnessed a wonderful advance in the building of huge four to six masted, steel-hulled sailers —schooner-rigged for coastwise and square rigged for deep-water voyages. While diminishing relatively, our sailing-fleet may be holding its own absolutely; and sail-power is a very efficient propeller for ships carrying bulky cargo.

As to steam, the fuel-consumption of a modern ship has been brought so low—so that, as remarked several years ago, "a sheet of note-paper burnt in the furnaces would carry a ton a mile"— that further progress in this direction does not promise much. The chief costs in ocean-freight are now the fixed charges, labor, insurance, etc., rather than fuel. It is in this line that an unmeasurable stimulus to foreign trade and travel has been felt from the invention of the wireless telegraph and the gyroscopic compass. We are told that transatlantic travel now loses, by reason of these aids, not one-fifth the annual toll exacted by the sea only a generation ago.

The Telegraph.—There is probably no other feature of the modern arts (possibly excepting the steam-engine) which has made such profound, albeit unconscious, changes in our civilization as did the telegraph, which came into use in the eighteen-forties. Up to that time the slow and disconnected railway-service had been the fastest means of communication available.

Marvelous as was the change wrought by the railway over stage-coach days, yet the former was but an improved stage-coach. Messages could still be transmitted only so fast as the human body could travel.

But the telegraph was really a marvel. It consumed no time at all. It disembodied the soul from its cumbering flesh and projected it through space regardless of time. According to the vernacular of a later day, whereas the telephone might boast: "What I say *goes"*; the telegraph might retort: "Huh! What I say *goes without saying."* It linked together people over larger areas than ever before were imaginable. In many ways days were reduced to hours, and states to counties. When the first Atlantic cable was opened, in 1869, New York was jocosely styled a suburb of London; but that, or its reverse, has since become a fact.

It was inevitable that so basic an advance in the solidarity of life as this should find reflection in an equally basic alteration of our political ideas and institutions. Unity of contact and freedom of intercourse between previously dissevered communities necessitates an aggregation of their political powers. It was this, primarily, which enforced drastic change in our domestic politics in 1861. It was this which compelled a revolution in our traditional foreign policy in 1917. Before this great new fact of human cementation by electric telegraph might become a digested part of our American body politic, two generations ago, the time-honored tradition of "sovereign state's rights," inherited from the crude jealousy of the early colonies, had to be "trampled to death beneath the feet of a million marching men," in the horrors and inspirations of the Civil War.

But digested it was. As soon as the railway and telegraph had been appreciably adopted the country had become mechanically a real unit. It must be one politically also.

Invention the Dominator of Politics.—Politics is nowhere the result of freak or whim, but always a consequence of physical and mechanical environment. Always and everywhere, in social evolution, it is improved means for *transportation and communication* which have been the foremost factors in guiding and promoting—in sheerly coercing—social advance. They unite into living, interacting organisms fragments of population or territory which were previously dissevered, and therefore inert.

They release sources of social energy hitherto unsuspected, the magnitude of which is not understood even after their presence has become familiar.

Without the railway and telegraph slavery and secession would probably have become permanent, for some decades after 1860 at least. The North would have protested morally and ethically, as it had been doing for a generation before; but it would have been living too far away, too indirectly affected by the South, to go to war about it. Certainly this would have been so without steam-transportation.

Without the Pacific railways, first really operative in 1870, California must inevitably have regained her original political independence of the states east of the Missouri. It would have been too far distant, in time and effort, for political unity. Under local and Asiatic influences widely different from those at work upon the East, "the Coast" would surely have drifted away from its earlier slender allegiance, which was hardened into true unity only by the telegraph, the railway (which in this case arrived second), and the Civil War which they aroused.

Communication Causes Consolidation.—Easy physical access and communication is the one cement by which peoples are first bonded into actual consolidation. If this actual solidarity be recognized properly and promptly in their political institutions, all is well. If not, the bonds will irritate rather than unite, and war or revolution must occur.

Institutions *must* be accurate and harmonious expressions of natural facts, else readjustment of an earthquake character must ensue. This is the fundamental law of modern social evolution.

No history can be understood without this law. There is no place in history in which it stands out more plainly than in the American development of the telegraph, the railway and the Atlantic cable.

More Recent Inventions.—The still more penetrating, if less spectacular, influence of such inventions as the typewriter (1872), the telephone (1878), the electric light (1880) and the trolley-car (1885), in the rapid development of modern civic conditions of size, congestion and activity of cities, can receive only bare mention. To many readers the changes which they wrought have been matters of personal experience. To the young they are already of the mysteries of the past.

Solidarity, Diversity and Civilization.—The telephone and the trolley-car (using the latter term generically to cover all forms of urban electric traction, including elevated and subway lines) contributed to the *solidarity* of the modern city. The electric light equipped it with that first requisite for social development, after solidarity—namely, *diversity*—by making the new, third "half-day" of city-life, the evening, almost the most important of the three. The attempt to imagine what would happen to modern social, theatrical, club, art and lecture circles if they should be forced to return to reliance upon the yellow, flaring, vitiating gas-flame, which formed the finest illuminant available when people now middle-aged were young, constitutes a reduction to absurdity.

The Elevator.—One other most important, though commonly overlooked, department of transportation deserves special mention. This is the elevator. The wonderful modern mushroom-growth of skyscraper office and apartment buildings is due to, or is permitted by, the modern elevator alone. Thirty-five years ago the sky-line of lower Manhattan was a virtual level of four or five story flat roofs, broken only by the church-spires, the shot-tower and the then Equitable Building. Such Manhattan would have had to remain had not elevators of a type then undreamed made it profitable to rent offices forty or fifty stories above the sidewalk.

The congestion of the slums has been paralleled by, and apparently enforced by, the congestion of business in the skyscrapers. The slums will not disappear until the skyscrapers come down. But this, if history repeats itself, will be quicker than they went up.

Invention in General.—Of progress in the more general manufacturing arts still more cursory disposal must be made. We are concerned with their effects rather than with themselves. The one of prime importance is undoubtedly that of rapid printing by steam-power, chiefly at the hands of Hoe. The speed and ease with which this process permits ideas to be disseminated among large numbers of people stands on a par with the railroad and the telegraph, or telephone, in its effect for solidarity and stability in modern communities. Either our nation as a whole or any of its large cities, if suddenly deprived of modern printing, would die of anarchy and riot, due to mutual misunderstanding between individuals and classes, almost as soon as it would starve bodily if all steam-transportation were to cease.

Almost the same is to be said of such an invention, for instance, as the Bessemer process for the cheap production of steel in large quantities, for rails, bridges, buildings, etc. Such material accomplishments stand as the very skeleton of our modern community-life, just as the railways stand as its blood-circulation and the telegraph and telephone wires as its nerves.

Indirect as may seem the connection between such uninteresting mechanical achievements and the ideas or tastes of modern civilization, they are in fact as closely interdependent as is the work of an artist with a healthy development of his bones and arteries. Our understanding of all the finer metabolic and psychological processes of the human body was impossible until the mechanism of the body in its grosser aspects had become understood. As one of the foremost instances of such may be mentioned Harvey's discovery of the circulation of the blood—a fact now so familiar a basis for every biological deduction that it is incomprehensible how any progress in medical science had been possible without it.

Yet Harvey discovered merely the hydraulic fact of circulation. The far more significant discovery of the alteration of the blood from arterial to venous in the capillaries had to follow that. The still more important hydrodynamic fact of blood-pressure must await both of these.

The parallel in social metabolism is perfect. We cannot understand that mysterious, yet all-explaining, transformation of human energy between the processes of production and consumption—as significant as the capillary transformation of the blood—unless we first understand accurately the grosser facts of invention, transportation, distribution, etc., which form its mechanical basis. It is to parallel somewhat for the economic and ethical community such pioneer work of the early anatomists of the physical body, that this book proposes now to trace roughly the connection between material invention, the data as to which have just been given, and the resultant evolution of American politics, economics and ethics.

Nineteenth-century Evolution.—It is against such a background of wonderfully rapid material accomplishment as the foregoing, then, that those less easily discernible but far more important changes in our economic institutions during the last half-century must be viewed in contrast. During the first half of the nineteenth century these changes, while already under way, had attained little significance. The beginnings of later growth were there, plainly enough; but their modern luxuriant development had not yet been effectively fertilized by the wide adoption of mechanical devices, some of which were even then already invented.

The steam-engine, the turbine water-wheel and the factory were already existent, it is true, long enough ago to have produced the economic crisis in England of 1830; but they had had little effect in America as yet. This country was growing too rapidly, land was too free and the factory too small a feature relatively to the rest of the country, to permit economic forces to be emphasized. We were still a nation of pioneers. Our obstacles were still chiefly physical, rather than organizational, as now.

Although invention was exceedingly active throughout the two decades preceding the Civil War, at which time we first became conscious of ourselves as a technical, rather than an agricultural, nation, laying the foundations for a later world-recognition as such, yet it took some time for this inventive outburst to exert appreciable economic effect. Even our railroads, the first feature of a pioneer land to assume economic importance, did not attain physical vigor until the eighteen-fifties, and other inventions of basic importance passed their adolescence still later.

The first reaction of invention upon American social evolution took the form of the development of slavery—a form of domestic servitude which, previously to the opening of the nineteenth century, had been comparatively unobjectionable—into a vast money-making system, embodying all the cruelties which always accompany profit-making on a large scale. The cotton-gin, the power-driven cotton-mill, the steamboat and the railway had together made cotton-growing practicable upon a scale of quantities and profits before unattainable. It was these subconscious innovations, and no peculiarities of Southern cruelty or Northern altruism, which, by the middle of the last century, had forced slavery into such prominence that all other interests must give way before it. It is these mechanical wizards which cast over America a spell which could not be dissolved until slavery had been abolished.

Thus our economic reactions from mechanical invention, during this earlier period, were devoted, first, to the development of slavery, and then to the dire struggle over its abolition. It was not until this political spasm was over that our modern economic history really began, in the credit-issues of the Civil War, in the boom times of 1864-72, in the rapid commercial and railway expansion of these years, and in the final collapse of inflated values in 1873.

Then again, even where economic forces are known to have been at work at earlier dates, we have no reliable knowledge as to their extent. Statistical science, as well as other arts, experienced a marked stimulus about the year 1850. Therefore, while data will always be carried back as far as appears safe, yet what follows herein concerns primarily only the last seventy years or so of American economic history.

The Blunder of 1840.—Of these early beginnings in economic development one incident in particular demands mention here, before the analysis of any details may be attempted. The early eighteen-forties witnessed a change in national methods and beliefs which, although quite subconscious at the time, and largely unnoticed in the histories written since, now assumes a prime importance in the light of facts and doctrines only recently become prominent.

When this youthful nation had first well awakened to the realization, during the first quarter of the nineteenth century, that development of natural resources was especially its duty and privilege, it was universally assumed, without discussion, that all enterprises of magnitude, such as highways, canals and finally railroads, should be organized, financed and built by the political government—the federal, state or county government, as might be. Even banking was undertaken by the federal government.

But the results of this policy, reviewed in a word, were financial disaster. However this result may be explained, as due to the youth and inexperience of the country or otherwise, there can be no question as to the fact: disaster.

The resultant reaction of public opinion was as complete as it was inevitable. Instead of the country's realizing that its principle of action might be correct, mere details of method being wrong, and setting out to educate itself in the public handling of public enterprises, it reverted into an equally tacit assumption, which has prevailed ever since, *that private resources should be relied upon to finance and direct virtually all large public matters.*

Perhaps through the genius of Franklin or perhaps through mere freak of fortune, one gigantic public service, that of collecting and assorting mail-matter, has remained public in method as well as in character. This is in addition, of course, to military defense, which has always been recognized as a public duty. But aside from these exceptions, and including even the transportation of the mails, all large enterprises have been financed exclusively upon the plan of private ownership—with reliance upon private profit, rather than public service, as both the motive and the controlling forces.

The further policy in this same direction, of having all small enterprises, down to the most modest corner-grocery or sidewalk fruit-stand, initiated and controlled in this same manner, is one inherited from the past in a manner still more subconscious. There has been even less question as to this than has applied, of late, to the private ownership of the "quasi-public" services. Yet, as will develop as we proceed, this systemless policy of free license to individuals to embark upon any and all economic ventures, without other responsibility to the community than to apply for a permit and pay their taxes, is one fraught with an even larger significance of modern tendencies, if not with menace of coming crisis, than the other.

We shall see that this general policy, reacting upon a phenomenal growth of invention to produce as startling a social change as did slavery in the same way, has had a fundamental bearing upon the economic history of the seventy-odd years succeeding 1840, stamping the civilization of which it has formed a part with those ear-marks by which it will be known, in all probability, throughout later centuries. Begun in the early 'forties, this distinctly modern policy of commercialism had already had time to leave its first imprint upon the statistics of 1850. By 1864 its growth, although still obscure, had sufficiently impressed Lincoln as a sign significant of the times so that, in his second inaugural address, written in the days of direst national distress due to the wavering issues of the Civil War, he took occasion to warn the country against its menace, as boding a crisis possibly worse than that of slavery itself.

Lincoln of course did not see this problem in the light which has since been thrown upon it; nor was it then obscured by its present intricacies—aided by the deliberate camouflage always accompanying huge profits and gigantic prestige. But his marvelous insight warned the country thus early against the dangers involved in issues which were purely internal and economic, rather than political; and in so doing he planted an invaluable milestone for our guidance in fixing dates of development of public recognition of this huge problem.

It happens, too, that the year 1850 furnishes us with about the earliest economic statistics of a national character approaching completeness or reliability, in the seventh United States Census. What follows herein will therefore be an analysis of that economic evolution of our land, recorded primarily in the Census reports, which began visibly to take form about 1840, as a result enforced by the physical, and particularly the inventional, history of the latter half of the eighteenth century; which gathered headway quickly thereafter; which experienced marked acceleration at the close of the Civil War and continued to accelerate irregularly thereafter until the close of the century; which witnessed a most phenomenal outburst, as the result of the Cuban War, as the present century opened; and which now shows signs of undergoing its most wonderful stimulation of all, as a fruit of the as yet unfinished Great War. As the physical and inventional growth which played the role of cause in this development has been accelerated, as the decades passed, in arithmetical ratio, so its accumulating resultant—modern commercialism—should naturally be expected to have accelerated in geometric ratio. This, we shall see, has plainly been the case.

So marked has this acceleration become of late that conditions are now fast approaching the critical point. There is indubitable evidence that in 1914, had not the Great War intervened with its artificial stimulus, diverting us from the smaller domestic to the greater world-problems, we should even now be grappling this internal crisis in one of the greatest struggles of our national life. The economic situation prevailing in the winter of 1913-14 and the following spring, when there were over a quarter-million of enforcedly idle in New York City alone, and when securities had fallen to near half of their normal value, with railway-traffic and mill-outputs relentlessly restricted—although no one here then dreamed of any impending world-war—was quite without a parallel in our economic history.

This present analysis of American history, then, will be based primarily upon the seven United States censuses from 1850 to 1910 inclusive. Our aim must be not merely to see what is our economic condition to-day, but what it was seventy years ago, and in which direction we have been tending since then.

CHAPTER II

THE SOLE AIM OF INDUSTRY: LIFE-SUPPORT

In turning from the tangible and visible to the institutional development of our country it becomes necessary, before resuming our narrative of facts, to determine carefully our concept of the fundamental aim of all industrial effort. For conclusions as to the significance of the historical facts—as to the nature, the success or the failure of our institutional progress—must vary widely, according to differing views as to these premises.

Accuracy at just this point will prove to be, as to later conclusions, what the aim of a gun is to the flight of the bullet—the prime determinant of hit or miss. In economics as elsewhere, no conceivable diligence in the final sorting of microscopic data, after an inaccurate start in the statement of basic principles, can ever convert into success the inevitable failure to hit the mark. Here is where the average professional economist goes far astray.

The task before us is the study of American economic institutions, their nature and their growth. In order to narrow this gigantic task we must begin by eliminating all debate of political issues. These last are not merely irrelevant. The prime lesson needed to-day is that they are impotent.

We are no longer ruled by the political powers which we have built up at such painful cost in the past, but by those far more powerful economic forces to which Congress must give a most attentive ear, or which work their will regardless of political restraint—not that they defy the laws, but that we cannot frame laws tight enough to stop escape. *Our political government now rests upon, is supported by and is controlled by our economic institutions, not our economic institutions by our political government.*

The evolution of purely political institutions is now fairly complete. With the enunciation of the principles of democracy in our Declaration of Independence and the adoption of our

Constitution, with later ratification and extension incidental to the abolition of slavery—with the advent of woman-suffrage, and particularly with that extension of political democracy to cover all small nations under some form of world-government which promises to be the result of the present war—political liberty has now reached a culmination to which little may be added, and one in which this continent has led the world.

Proportional representation, the initiative and referendum, and a few other such minor measures which, however important in themselves, are plainly secondary to what has been accomplished, and plainly fail to touch the big economic issues, are the only political refinements still in the air. Our political campaigns and legislative sessions have descended from their early dignity into the commonplace, if not the sordid, because *they no longer concern issues vital to the people, nor to the progress of the hour.*

That our political evolution is complete is proven by the fact that political issues have been overwhelmed by economic ones in every form of public debate. The sole apparent exception to this is the common, but mistaken, effort to answer economic demands with futile political remedies.

The Economic Problem.—The basic question of all economics is: What is the real *aim* of the industrial system of any land?

This is the crux of the whole problem. Society to-day is doing certain things with marvelous skill and amazing energy, only to find, after they are done, that they have not brought happiness, nor even material comfort. Economic literature is full of discussion of more or less efficient methods for the application of human effort to certain ends, *without a word as to the comparative wisdom of ever undertaking the enterprise in question,* nor as to the value of the result when gotten, however efficiently.

In spite of all our increasing scientific and technical accuracy and efficiency, world-wide discontent and turbulence are increasingly rife. Our wonderfully systematized factories are not keeping up our productivity of contentment. Men are everywhere trying to make new records of speed or accomplishment, yet instead are making fools or brutes of themselves, by the folly of the thing attempted.

The Natural Economic Aim.—No apology is needed, therefore, for recurrent emphasis upon *the proper aim of all economic* *effort.* The economist must keep his mind fixed upon this guiding question as the sailor keeps his eye upon the compass.

It must never be forgotten, then, that all modern systems of industry and commerce are but the intricate developments of the simple, primitive processes by which the isolated savage or hermit procured for himself, from the soil, the sea or the forest, what he wished to eat or wear. However complex these modern systems may become, to meet modern conditions of enormous populations, united over vast territories by intricate facilities for communication, *this basic purpose remains ever unchanged. It cannot be changed,* however lost to view it may at times become.

The sole natural aim of all industry and commerce is to

Feed the Ultimate Consumer.

The sole object of all wholesome economic effort is to support and elevate individual human life.

Any other devotion of effort than that, amongst an industrial or commercial people, is a sheer waste and dissipation of energy, whatever may be its solemn sanction by law or tradition, or its apparent pecuniary profitableness. This is the acid-test by which each atom of economic effort must be identified, as either productive or unproductive of human happiness, and hence to be encouraged or abolished.

Natural Production.—Imagine, then, a hermit living in the edge of a wood, with a meadow and a river near by. All the natural resources for agriculture, forestry, hunting, fishing, herding, etc., may be supposed to be available. But all of these, we will imagine, he must develop alone. In this work what must be his guide? In which direction shall he exert his strength and skill?

The only possible answer is: His own *desire.* For his desire is supposedly a prudent, natural one, tempered by experience, rather than the untutored impulse of a child. Hence the value or efficiency of his own efforts in behalf of his own happiness is measured solely by the accuracy with which he permits his desire to guide his labor.

If, for instance, he proves a most industrious and successful farmer at raising turnips, yet he detests turnips, or a most fortunate fisherman, when he prefers game to fish, *his labor will not feed him. Although he may be rich in commodities he is* *poor in happiness.* Through ignorance or perversity or superstition, he is starving in happiness amidst material plenty.

Social Motor-nerves.—In the case of the hermit it is difficult to imagine what motive should lead him thus to disregard his own desires; for the one delight of the hermit-life is the freedom to do exactly as one pleases. But in the case of modern society, wherein the impulses which guide each individual act are but crude transmissions, through a clumsy, intricate social mechanism, of a most remote and composite individual desire, originating with a myriad of unknown persons lost to view amidst the intricacies of the Consuming Public, there is grave doubt as to this accuracy of transformation of basic biological desire into actual social accomplishment. A prime characteristic of modern society is its proneness to find itself developing acts and institutions *which it did not intend and does not want.*

The one objection to life in modern congested society is that, whatever may be the consolations, one cannot do as one naturally pleases. Desires no longer guide actions. Effort is constrained by environment and necessity, rather than by sentiment; and environment is determined for us by fixed institutions which cannot be changed by individual will.

This is most obviously true in the economic field. There people normally work long after they are wholesomely tired—long after they would prefer rest to pay, if only the rest might be had without losing the job. Conversely, they often idle when they are hungry and anxious for work.

Yet the modern economic system is merely the latest development of the muscles of the primitive hermit. The modern Ultimate Consumer corresponds with the palate of the hermit, as to food, or to his back as to clothing. In between palate and muscles, in the hermit, lie merely his motor-nerves, translating demand into supply. Yet if their action be perturbed by the presence of some false superstition in his brain they will not transmit truly. He will act insanely.

Similarly, in between the producing factory-system of modern society and the Ultimate Consumer, whose desires alone must guide it, lies the whole intricate fabric of sale and purchase, resale and repurchase, attempting to translate the demands of a myriad of distant, scattered and unidentified Consumers into productive activity within the factory. How much more easy is it, in such an indirect transmission as that, that, if there should lie in the brain of society some false economic superstition, our ultimate distortion of these originally wholesome demands may become as erratic and inefficient as the vagaries of a crazy hermit? As, in the individual, it may be either the originating brain or the transmitting nervous system which develops erratic action, still more is this true of society.

Therefore, the social question now pressing this generation to the wall for a reply is: *Are our economic motor-nerves working truly?* Does our selling-system transmit truly to the producer either the desires or the payments of the Ultimate Consumer? Is modern commercialism doing what the Consumer really needs or desires? Or may it not, on the other hand, be directing its best energies into other acts, which may net it good profit but which starve the Ultimate Consumer?

Value.—It is only in the market that these questions may be answered. It is only where produce is consumed in the Ultimate Support of Life that criterion may arise as to whether value has been produced in the making of it, or whether effort has been dissipated in the creation of sheer rubbish.

This is the supreme economic test. *That thing alone has value which, because it nourishes and pleases the Ultimate Consumer, stimulates his motor-nerves and muscles into a renewed activity capable of producing in turn the equivalent of that consumed, or more.*

Economic Sovereignty.—It is at this point alone, also, that arises the sole authority for directing production. The poorest in the land, if he have but a dime to spend, rises, during the spending of it, into supreme authority over the industrial system of the land. For he is a free agent in selecting what he shall purchase, and the thing thus selected from the shop-shelf must then be replaced by some factory; while the thing next to it is, for that moment, unwanted, worthless rubbish.

In all economics it is the desire or need of Him-who-Spends-Money which exercises supreme control over all industry. That authority each producer must obey absolutely. Just as the most solitary recluse in the world is a slave to his own desires, so, in the most congested society, the producer is the slave of the Ultimate Consumer—not in an unnatural, oppressive subjugation, but in a natural wholesome submission which forms the sole natural foundation for social happiness.

As producers, neither recluse nor factory-hand have anything to say as to what is to be done. Each must work at what is wanted for consumption. *It is only when the consumer-half of either the hermit or the factory-hand comes into play that he becomes Absolute Sovereign over all who work.*

So long as the Ultimate Consumers like and can subsist upon what a workman makes he produces *value,* and is prosperous and happy. Just as soon as they reject his produce—although it in itself may not have changed—he ceases to be a producer, or to be happy and prosperous, whatever may be his industry or skill. A factory of ten thousand able artisans may work industriously for a year; yet all they will have produced, if it does not meet with the Consumer's approval—if it cannot be sold—will be sheer rubbish.

Social Perfection.—It is the degree to which this sovereignty is embodied in the economic organization of a nation that that nation preserves to its people effective justice, true prosperity, social content and permanent stability. It is the perfection or imperfection with which a society guarantees to each Sovereign Consumer this right, authority and opportunity to control and direct most accurately the productive effort which supplies him with that upon which he subsists, which measures that society's efficiency or inefficiency in the development of human happiness, domestic peace and social stability.

Just as all political liberties rest inalienably upon the consent of the governed, manifested in a jealously guarded equality and freedom of ballot-franchise for the individual Voter; just as the autonomy of the individual conscience in all matters of divine worship lies at the bottom of that religious liberty which men have found, by centuries of bitter experience, to be the first requisite for a stable, civilized society; so the no less important economic liberties are founded upon the breadth, purity and freedom with which the Ultimate Consumer exercises his naturally sovereign right of control, at the point of retail purchase, *over all industry of production and distribution.*

Orthodox Error.—So simple and obvious is this truth that its emphasis seems silly. Yet the bulk of all present economic discussion wanders away into impotent irrelevancy through carelessness or error at this one elementary point. Not only whole volumes, but whole libraries of treatises, have been published, and are regularly accepted by our universities, although they are based upon the arbitrary, unnatural and unjust assumption —often made unconsciously—that some other thing than the support of life, or the gratification of desire, in the Ultimate Consumer, is the criterion of value in industry, or that such other thing is equivalent to human life, or that economic sovereignty should be centered somewhere else than in the Ultimate Consumer.

Thus, to most economists, the possession by a thing of "value in exchange" stamps it as having value. Yet how can this be cogent? There are many things, such as lottery-tickets, or seats at a prize-fight, or bottles of whisky, or lumps of opium, which possess high valuation in exchange; yet all agree that they are *biologically* destructive of life, and therefore cannot be conceived as having real value.

Why does not this same criterion apply *economically?* Why does not this same question attach with equal force to some other things, such as stocks, bonds, franchises, etc., which are everywhere admitted as having great valuation in exchange? We must have some criterion of true value which is much more reliable than "value in exchange."

The Sole Economic Criterion.—In the present work no haziness upon this issue will be tolerated. *It is the life of the Ultimate Consumer which alone counts as of value.* Commodities or services embody value solely as they contribute to that life. All else is dross, waste or poison.

Therefore no middleman nor duplicator nor advertiser nor financier, nor any intermediate service whatever, between the original source of quite raw material and the Ultimate Consumer, possesses any economic rights whatever, except as he or it may actually contribute to the life-support of the Ultimate Consumer. Hence each of these may wield economic sovereignty only when, in his own function of Ultimate Consumer, he buys the produce of others.

Similarly, no profit, nor income, nor credit-instrument, nor "security," nor commercial enterprise, nor instrumentality of any form whatever, will be admitted as being socially wholesome, or as having any value whatever to the community, except as it may actually create life-support for the Ultimate Consumer.

In order to do that, any such an instrument or service must represent effort productive of life-support according to the taste of the Consumer; and to meet this test it must exist *at the conscious behest of the Consumer,* and not merely be accepted by him because it is thrust upon him. This gage of right or wrong in the economic world must be supplied with the utmost sternness.

Therefore, in the expression of this taste, society must guarantee to the Consumer the fullest opportunity to inform himself as to all economic facts. There can be no secrets from the king. The natural will of the Ultimate Consumer must find itself in accurate, free control over all economic facts.

The Basic Economic Contrast.—This basic contrast between that portion of the industrial or business system which actually supports the life of the Ultimate Consumer and these various other things incidental or irrelevant to it, or parasitical upon it, pretending to an importance which is not theirs by right, may be crystallized within the terms "value" and "valuation" respectively, to which may be assigned these preliminary definitions:

(1) *Value* is the ability of any human activity, whether exerted directly or stored potentially in the form of a commodity, to support the life, or at least gratify the desire, of him who ultimately absorbs it.

(2) *Valuation* is the measure in money which the existing economic system places upon this or any other act or commodity—what is commonly called its "value in exchange."

Economics in Terms of Human Energy.—A full understanding of these definitions will not be possible until a number of factors have been considered. For the present it suffices to note that all the quantities concerned and measured are amounts of *human energy.* It is human energy alone which produces value. It is human energy alone which is to be produced as a result of its ultimate consumption. The energy may be either that of brains or of brawn, but it is always human.

While we may at times be forced to use money as an approximate measure of human energy, for lack of some more stable and penetrative standard, yet money is recognizable as of value itself only because it embodies, and therefore serves as a means for the transfer of, human energy. If it be true, as has been suggested, that no satisfactory measure of human energy can be found, then we can never have any exact science of economics, able to foretell manifestations of human energy as accurately as the science of astronomy foretells eclipses. But neither of these assumptions will be given credence here, in the premises.

CHAPTER III

THE COTTAGE-SYSTEM AND THE FACTORY-SYSTEM

The Archaic Cottage-system.—The standard productive system of a century or more ago was a very simple affair and needs little description. Known widely as the *cottage-system,* the term indicates approximately the nature of the "system."

Yet work need not be done in a cottage in order to fall properly under the term cottage-system. The name implies merely that, whether done in an early, crude shop, or on a farm, or in the home, it was done upon the simple plan followed by virtually all our ancestors in making virtually all their household needs. That is, the thing was produced in fair entirety by a single workman, or a single household; it was consumed either by those who made it, or by Ultimate Consumers who bought direct from the producers; and *all the tools, raw material and product involved were owned by those who did the work.*

Although by a century ago a beginning had been made in the replacement of this simple plan by the modern factory-system, yet it was only a beginning. Long after that time, even down to the year which has been selected here as representing the start of the modern period, 1840, the bulk of all the commodities which are now regarded as exclusively factory-products were still made (if made at all) by the housewives, or by the men-folk in the shop attached to almost every farm, or in a village-shop which catered only to village-trade. Although no date can be set at which this plan gave way to the modern one, yet year by year, and industry by industry, the transfer has been made from the simple, primitive cottage-system to the intricate modern factory-system; and the bulk of this transfer has been effected since 1840 or 1850, the initial point of our statistics.

Riches Follow the Abandonment of the Cottage-system.—Simultaneously with this transfer there has arisen a marvelous, a quite incomprehensible, rate of material productivity. Trite as is the effort to find adjectives fit to express the wealth of to-day, as compared with that of two generations ago, yet the duty may not be omitted here to impress upon the reader the fact that this increase, during the last seventy years, has been little short of the miraculous. Still more must it be emphasized that *this increase has been simultaneous with the shift from the cottage-system to the factory-system of production.*

Just how much richer we are to-day than seventy years ago we cannot say, for of many of the things in which we are now so rich we then had none. All we can do is to admit, as axiomatic, that the ratio of increase has been tremendous, and that it has been a result of the adoption of the factory-system.

It is safe to say that not a serious mind in the land, in either commercial or professional life, would dare to doubt this relationship of cause and effect, nor to advocate a return to the pristine cottage-system of production. Certainly if any college-professor or theorist in economics should urge any such doctrine, he would be cordially attacked, or at least ignored completely, by every practical man of affairs.

The Cottage-system Obsolete.—It is first to be noted that the disappearance of the cottage-system is now, and has been for some years, practically complete. However we may discover, later in this analysis, that much remains to be done in the way of a complete adoption of the factory-system, its predecessor is surely already dead and gone. It is universally agreed amongst economists that no workman adhering to the cottage-system can possibly compete with his fellows in the factory-system, and live.

In the sweatshop, it is true, there still persists a queer remnant of the forms of the cottage-system, carried on really under an impure form of the factory-system; but it is universally regarded as an unwholesome and unwelcome survival of the archaic, in both its economic and its ethical results. In the fancy work of the lady of leisure, or in hand-knitting for the army, lies another fossilized specimen of the extinct system. But in every other walk of industry productive labor is synonymous with special, undomestic premises, and all the other attributes of the factory-system. Even literature to-day is conducted usually in a business-like office, near the public library of a great city, instead of in a private library in a home on a shady street, as was true of the foundations of American letters.

All this being so, it becomes of paramount importance to inquire most carefully as to the exact contrast between the cottage- and the factory-systems. The former, in its simplicity, has already been sufficiently defined. But what is a factory-system? The collection of mere buildings and machines called a factory is easy to see and understand; but just what is the modern factory-*system,* as an institution?

The Modern Factory-system.—The following definition of the factory-system is taken from Bogart, whose excellent history of American industrial progress may be relied upon for many facts, and represents the prevailing view of the most intelligent class of public opinion:

> "By the factory-system is meant the concentration of all the processes of manufacture in a factory, involving their withdrawal from the household and shop where they had previously been carried on; it involves also the organization of the workers under skilled management, for stipulated wages and fixed hours, with production for the general market and not upon order."

But this definition is far from satisfactory. It is based in the first place upon a distinction as to *locality;* whereas locality, as will be seen shortly, is quite an incidental feature. The factory-system is universally relied upon, for instance, in business-offices; or it may be carried on in the home, as in the case of much dress-making and some literary work; while the sweat-shop system, which is always carried on in the home, is a much nearer approach to the factory-system than to the cottage-system.

The items of superintendence and stipulated wages are features essential to the factory-system, it is true, and "fixed hours" is usually so. But the distinction drawn between work for the general market, in contrast with working upon order, has naught to do with the real difference between the two systems.

Origin of the Factory-system.—Historically speaking, the factory arose originally from the cottage-system through the invention of power-looms, the steam-engine, accurate machine-tools, huge cranes, etc. To-day it comprises an all but incomprehensible variety of costly, powerful or delicate appliances.

But it is the invention of these, and not any deliberate, intelligent perception of the valuable possibilities of the factory as a system of industry, which forced society into its reluctant adoption. This automatic, involuntary adoption of the factory-system was one of the first of the many instances which this investigation will uncover, of society's taking its forward steps in evolution quite without any deliberate intent, or even any consciousness of the direction in which it was striding.

For, this adoption of the factory, as a thing inevitable if we are to make use of modern inventions, once having been accomplished automatically and blindly, society has only awakened gradually to the realization that the value obviously there was inherent in the factory-*system,* as a thing quite apart from the mechanism of the factory. In reality the greatest potentialities of the factory-system, as a system, rest upon features quite other than its tangible appliances. These features are ones of *organization,* rather than implement.

Thus the factory-system is used to-day to impart efficiency to many enterprises which make no appreciable use of those appliances which forced that system into adoption. Stenographic and accounting forces, frequently involving hundreds or thousands of operatives, are universally organized upon the factory-system, although they use neither power nor costly tools. Libraries and colleges, the post-office and the public schools, and the rapidly expanding administrations of our cities, state and nation, are all now operated upon the factory-system.

Everywhere this system has been tried its efficiency has been proven and its further adoption insured. It has spread over the entire face of the globe. The populations which have adopted it have everywhere multiplied like rabbits and flourished like the wicked.

Distinguishing Peculiarities of the Factory-system.—It is therefore very much in order to inquire most carefully what it is about the factory-system, as a system, which differs from other known methods of organizing production. To the steam, hydraulic and electric prime movers, the huge cranes, the ponderous tools, the hordes of noisy looms and the intricate delicacy of electric communicative apparatus due credit must be given. But this still leaves unexplained some huge gains which are peculiarly due to the particular form of organization adopted, which has now become the prime characteristic of the factory-system.

Not only are these organizational advantages superior in importance to the mechanical features of the factory. We shall see later that the intricate collection of appliances *could not function at all,* unless backed by the peculiar method of organization which has become linked therewith wherever factories are used, regardless of continent, climate, form of government, or literacy or illiteracy of personnel.

The Factory-system a Matter of Organization.—The significant contrast, then, between the archaic, obsolete cottage-system and the modern factory-system, explaining the all but incredible progress in material productivity accomplished during the last century or so, is not primarily one of form of appliances used, but rather one of organizational methods. This contrast in organizational methods is at least four-faced in its nature.

(1) *Ownership* of tools, materials and product on the part of the workman has disappeared, and *possession* has taken its place. Whereas the workman under the cottage-system had to own both tools and raw materials before he could begin his work, and then owned the product also, which he must sell before he could enjoy what corresponds with modern wages, the workman under the factory-system is *never* allowed to own either tools, raw material or product.

(2) *Competition* has been replaced by *monopoly.* Under the cottage-system the workman was responsible for finding his own work, and for keeping it. Under the factory-system, the workman once assigned a job is never allowed to engage in struggle to keep it. He is not allowed to struggle to secure it. No other workman is allowed to question his right to his job. The explanation of the success of the factory-system is that, under its peculiarities, and chiefly the first one listed above, *no other workman is ever tempted to even try to get his job away from him.*

This is so because nowhere in any factory is *duplication* of service permitted. Only one of each department of effort—one foundry, one machine-shop, etc.—is permitted, as contrasted with twenty such, competing with each other, prevailing in the cottage-system.

(3) *Credit* is universally advanced, in the form of costly appliances intrusted to workman for the good of society, without

the exaction of either security or interest-charge. The only thing required is proof of sobriety and industry of character, and suitable craftsman's skill.

(4) *Specialization* of effort, and hence continual *interchange of material,* are carried to the extreme degree possible. But this last phase of the factory-system, it must never be forgotten, would be quite unattainable, in spite of the assistance of a whole profession of "efficiency-engineers" as designers of fluidity of effort, were it not for the presence of those features of organization preceding this last in the list.

For instance, the size, power, speed and delicacy of the modern steamship has become possible only as we have adopted the policy of intrusting it to a non-owning, salaried commander, without waiting for him to acquire its ownership under hope of private gain. China, Australia and New York have come into intimate touch with each other not merely because steam has displaced sail. *The steamship could never have replaced the sailing-vessel* had we not abolished the all but universal practice of ownership, in every step of construction and operation, which was characteristic of our merchant marine of two generations ago.

Specialization and Interchange.—In reviewing these contrasts between the organization of the obsolete cottage-system and the successful modern factory-system, the order of listing given above will not be followed. This is done because the list runs in order of relative importance. But the degree of familiarity in the public mind is in exact reverse from this. The feature of specialization, which is quite dependent upon the features of ownership, monopoly and credit peculiar to the factory, is the one most familiar in debate. Therefore it will be considered first.

Although labor under the cottage-system, or even under the feudal system which preceded it, was specialized to a degree, men being known even then as bakers, carpenters, etc., yet the modern factory-system carries specialization to a degree far beyond that possible in the cottage-system. Every factory-hand, even if unskilled, specializes upon less than what was formerly a single trade.

The modern shoe-maker, for instance, knows nothing of real shoe-making. He may operate an "insole-tacking-machine" or the like, which performs only one little part in making a shoe, and he knows nothing about all the other steps in the process. A single publication of the United Shoe Machinery Company describes fifty or an hundred different successive machine-processes, combined to form *the mere putting together of a shoe;* and that, too, from ready-made parts, such as soles, uppers, vamps, counters, etc., each of which had been supplied from a factory of its own, and each representing its own string of distinct machine-processes embodied in it.

The "hand" who operates any one of these several mechanical processes, in any one of the row of factories through which untanned leather (for the tannery itself is another such a combination of processes) passes upon its way to become a complete shoe, has been forced into a degree of specialization undreamed in the days of cottage-industry. It is a degree which is virtually unimaginable, even to-day, by that vast mass of readers whose lives have never carried them appreciably within factory-walls. It is unimaginable even to the factory-hand or corporation-official, because his work carries him into contact with as small a portion of this whole as an enlisted man sees of a military campaign in which he takes part.

Ownership versus Possession.—Since this degree of specialization has become possible only as the feature of ownership has departed from our industrial system, replaced by possession and factory-credit instead, these topics must be given important emphasis.

The prime characteristic of the primitive, inefficient and now obsolete cottage-system, in contrast with the far superior factory-system which has superseded it all over the world, by survival of the fittest, is that in the former the institution of *personal property* was everywhere obvious and inseparable. It was intimately interwoven and identified with industry at every step. The shoe-maker, for instance, not only aways did own, but he always *must* own, his own tools, thread, lasts, etc., before he could enter upon the practice of his trade. Then he must buy his own leather before he might begin actual work. After he had completed it he inevitably owned the finished product. Finally, he himself must sell it, usually to its Ultimate Consumer, before he could enjoy any "wages" for his labor. His work was bonded at every step with his personal property-rights therein.

To this rule there was never any exception, aside from the gradual outcropping of the factory-system, in sporadic cases, as it began its extermination of the cottage-system. Indeed, so universal and basic is this distinction—of *ownership-in-industry* as characteristic of the cottage-system, and of non-ownership as characteristic of the factory-system—that it must be accepted as one of the two or three determinative tests for defining where one system ends and the other begins. In comparison with this criterion all tangible differences as to tools, materials, premises, power, and form of pay sink into a secondary position as accidental and unimportant details.

Modern Abolition of Property-rights.—For it is a universal characteristic of the modern factory-system, to which there is no exception whatever, that within its precincts

All Property-rights Have Been Abolished,

so far as concerns anything to do with the factory and its work.

This is not saying that property has been confiscated. It is merely saying that *the institution as a whole has been abolished.* It is not needed. No one is conscious of its absence.

No question of "mine" or "thine" is ever permitted to arise within the factory-premises. No one within the factory, so far as the conduct of the day's work is concerned, *is ever permitted to own either the raw material worked upon, the tools with which it is transformed, or the product finished by the laborer's effort;* and no one feels the need or desire for any such an ownership. Everything, it is taken for granted, belongs to the factory, exists for the factory and is to be used by anyone who can contribute thereby to the good of the little factory-community.

For the modern factory-system has adopted completely and exclusively that maxim of Prudhomme's so often half quoted, so universally detested by the conservatives in their philosophy, yet so sacredly treasured in the bosom of their industrial premises and their daily administrative acts: "Property is robbery; possession is liberty." For every factory-owner or employer of labor, on any sort of premises whatever, approves enthusiastically and maintains universally, just so far as his authority can be extended by law, *a system by which free possession and use of anything in the factory is guaranteed to every man, provided merely that he be capable of making use* *of it, while property-ownership therein is absolutely denied to anyone.*

The men sitting at the benches or machines may own the money in their pockets, of course, or the home left behind them; but these form no part of the factory and have nothing to do with the day's work. *The factory-system begins where ends the institution of ownership on the part of the worker.*

So far as the function of the factory is concerned, private ownership has already been abolished as completely as has the cottage-system of industry. Community-use, as a basic institution, has been substituted for that of private property, by the authority of *all* employers of labor.

To this statement there can be no exception. We are referring here not merely to a major sentiment of the business-community. This policy initiated and adopted by the propertied men-of-affairs of the country, to prohibit all ownership-in-industry on the part of those engaged in it, *is universal.* There has never been a tenet of orthodox religious faith which has been regarded with greater or more universal sanctity than is enjoyed by this rule—that of exclusion from modern industry of all ownership by the workers.

Sporadic Cases of Profit-sharing.—The relatively slight introduction of the plan of profit-sharing, it need be merely remarked here, has not been overlooked in making these statements. It will receive attention later.

Competition versus Monopoly.—The second characteristic of the cottage-system, as contrasted with the factory-system, lies in the fact that every workman under the cottage-system had to fight for his job. He had no certainty of tenure of it when secured, nor certainty of pay for his work when done. Any other workman was free to strive to parallel, invade or undermine his efforts. Any honest, skillful workman was liable at any time to find that his labor had become worthless upon his hands, because some other workman had duplicated, in part or whole, his efforts, or had surpassed him in ability to find a customer, if not in doing the work.

The result of this universal license to compete was that the workman often suffered from work unpaid—not because the Consumer would not pay, but because he would not buy—while the community suffered from duplicated and wasted efforts. The first lowered the average "wage." The latter entailed high prices. The only thing gained by this competition was a rough assurance that the price would rise no higher (above the natural price) *than was compatible with the presence of these two costly wastes.*

In the factory-system, on the other hand, this situation is exactly, deliberately and carefully reversed. The factory-system and its efficiency rest basically and openly upon universal monopoly. Every workman, when once assigned a job by the Central Office or Superintendent, performs it uninterrupted in his tenure thereof, unparalleled by any other workman, and undisturbed by doubt as to his pay. No one may take his job away from him, nor may even try to do so. No one may deny him his wages when done. His protection in these things is maintained with scrupulous care.

Whatever deficiencies may be discovered in the factory-system in other lines, as this analysis progresses, or whatever oppression of the workingman may be found to arise through uncertainty as to his admission into the factory-system at all, or in continuity of employment, or whatever may be the deficiencies in the purchasing-power of his wages after he has gotten them, these points of superiority over the old cottage-system in productivity, just listed—when once the workman is at work within the factory—must be admitted and emphasized. There he enjoys assurance of a monopoly of his job. The community enjoys the efficiency of having him work undistracted and uninterruptedly, without duplication of his efforts by one, ten or fifty others. He is certain of his pay, whatever it may be, whenever honest effort may have been completed, and without awaiting the collection of the value of what he has produced from its Ultimate Consumer.

In all of these respects the factory-system has proven itself a great advance over any of the systems of organizing effort which have preceded it in history. In assigning credit for the wonderful modern expansion of human productivity, the bulk of it must be allotted to these and other features, to be described later, which are broadly peculiar to the factory-system. A better understanding of these will be given in the next chapter.

Part II

ECONOMIC PRINCIPLES

CHAPTER IV

PRODUCTION

Definition.—The word production will be used in this book to include all effort, whether of brawn or of brains, which aids in transforming the raw materials of the soil, the sea, the forest and the mine into commodities or service which are of real life-support to the Ultimate Consumer, and their transportation and subdivision into retail-units delivered into his hands, for his destruction thereof in the conduct of his life. It applies to everything needed for the support and growth of human life —food, clothing, shelter, transportation, communication, education, amusement and inspiration — manual labor, superintendence and invention alike.

It must include not only all effort expended in maintaining the necessary current supply of things of standard kinds, but also all effort aimed at the extension of facilities or appliances into new scales of operation.

Criterion as to the true production of life-support for the community plainly must pivot upon the *reality* of the aid embodied in any commodity or service, for supplying to the Consumer what he selects at the retail-counter, and must not be misled by any mere supposition, upon any person's part, that a thing aids when in reality it does not. That is to say, we are dealing here with physical realities, rather than with human delusions concerning them.

We shall exclude from this discussion, however, all *moral* delusions, as contrasted with *economic* delusions. This book is a study in sociology, not one in psychology or morality.

Thus, for instance, alcoholic drink and horse-racing are regarded by many as immoral and dissipative. Yet in this book the effort directed toward producing alcohol or race-horses will be classed as productive. This is not because these things necessarily promote life, but because the Consumer thereof, when he patronizes them, *knows that he is doing so.*

He has therefore asserted a true economic demand for them. Whatever delusion as to their value for his life-support may be involved, is housed within his own brain, and not in the social structure.

But, on the other hand, effort directed toward the printing of the appurtenances of stock-gambling, for instance, will be classed as unproductive and dissipative of social energy. This is not because either the printer or the broker is necessarily immoral, but because the man who pays the cost of stock-gambling—who is neither the printer, the broker nor even the lamb, but some Ultimate Consumer of coffee-mills in Montana —*is not aware of that fact when he devotes his money to encouraging stock-gambling; nor has he the power to stop it if he would.*

Subconscious Social Action.—His economic act is therefore neither free nor conscious; it is automatic and subconscious. His delusion is not a personal one, due to willful ignorance or immorality, as many believe is the case with the patron of alcohol or horse-racing, but is one enforced upon him by our lack of organization of our economic community. Both his ignorance of the true result of his act, and his impotence to remedy or modify that result, are thrust upon him by society.

It is this sort of subconscious economic dissipation of productive possibilities in which we are alone interested here. That involved in personal immorality is to-day distinctly secondary to this, and is the concern of preachers, teachers or psychologists, rather than of sociologists. We are not arguing that it is harmless, but that it lies outside our topic.

The Motive Force of Production.—Modern material productivity, in this sense, is virtually all of it carried on in response to the stimulus of pecuniary income. That is to say, however a man may disregard pecuniary considerations in order to be a scientist, an artist, a patriot or a preacher—and however these callings may be of great productivity in the broader sense of the term—it is still true that whatever effort he gives to production in its routine sense is in defiance of these personal, non-economic preferences.

Conversely, whatever he gives to altruistic aims must be done in defiance of economic considerations. However profitable to society in general altruism may be in the long run, in the short run it is never profitable to the individual.

Those things which we do solely in order to gain money may be devoted to society's good in one sense, it is true, but it is wholly a subconscious sense. For the body economic has its subconscious functions as surely as the physical body has. These automatic, routine, subconscious, productive processes of economic society bear the same important relation to its conscious altruism as the subconscious heart-beats of a preacher bear to his inspiring sermons.

Economic Determinism.—When one turns away from his ethical or altruistic instincts, to heed this economic pressure for the daily necessities of life, he will always, in the long run, turn toward those tasks which are best rewarded in the pecuniary sense. The day has long gone by when economic production, in any appreciable degree, is guided or promoted by the desire of the doer for what he produces. The worker who clings to this idea starves, however he may help humanity.

All modern degrees of productivity are attained only through the specialization of each worker to an extreme degree, whereby he produces enormous quantities of some single thing for which he has no desire whatever, in order to interchange this produce for an equally enormous variety of smaller quantities of other commodities, made by other producers. This is the modern system, which no man may defy and long survive.

In its operation psychology and ethics enter scarcely at all. The producer does not move, in his selection of work, in response to his sentiments, but under command of his intellect, guiding him whither the pay is best. His tastes, it is true, find proper outlet when, in the role of Ultimate Consumer, he comes to select his purchases; but in the selection or performance of his productive work his psychology falls into a place quite secondary to his reason.

Modern Automatic Involuntariness.—When one turns to the question: What is it which determines the aggregate volume of energy devoted to production? one gets his first lesson as to this *involuntariness* of all modern social phenomena. And also as to their subconsciousness.

That is to say, in the simpler life of the individual hermit the motive forces of life are all simple, obvious, direct and voluntary. When one is hungry, one works; when tired, one rests. That is the delight of the hermit-life. At every turn the will decides its preference, and then executes it. The result is what was consciously intended.

But under modern social conditions life is quite otherwise. It is almost the exact opposite from this.

To-day it is obvious at a glance that very few, if any, do what they please in the industrial world. Those who are plainly suffering from fatigue continue to overwork until they drop—for the alternative is complete idleness and want. Those who direly need supplies, and who plainly are sincerely seeking work, often are forced to remain idle. Those who need exercise above all things continue in overfed sloth—in spite of splendid gymnasiums, sanatariums and "health-farms," built expressly to tempt that muscular exertion which never ought to need temptation—until they die of apoplexy or hardened arteries. In no direction are the reactions of the individual motor-nerves to the visible, external stimuli either natural or free.

Volume of Production.—Such is also plainly the case with production as a whole, as carried on within our aggregate national factory-system. It is not spontaneous and natural, but forced. Let society once adopt an economic system in which interchange is made a function pre-essential to production and consumption—as society has done subconsciously and perforce when it encouraged modern invention—and from that time forward it is irrevocably and uncontrollably *the possibility of interchange, and not the mere human desire for production or consumption,* which becomes the determining, dominant factor in all questions of industry or idleness.

This is distinctly true of all modern production. To-day

Nothing Can Be Produced Unless It Can Be Sold.

It is the selling-office and the retail-agency which dominate and direct the activities of every factory, large or small. It is the particular quality and quantity which can be sold which alone can be made.

Let any person or factory attempt to defy this law, by producing that which cannot be sold, and loss to all, rather than gain, is the result. Production has not been performed. Life-support has not been created.

The thing thus produced cannot enrich society, because society cannot make use of it. It cannot enrich the producer, because every producer starves on his own produce; he needs something quite different. Whether it be apples and cabbages rotting on the ground within a few miles of congested, starving cities, or vacant-lot truck-gardens which force the professional farmer to leave some of his produce unsold, or labor often enforcedly idle, it is alike an illustration of the modern fact that *that which cannot be sold might as well never have been created.*

The Determinant of Volume of Production.—The law which determines the aggregate volume of production at any time, therefore, is *the quotient reached by dividing the aggregate purchasing-power of the people by the average price of commodities.* This law is rigid and relentless. Unless we either increase the purchasing-power of the people, or lower the price of things offered on the retail shop-counter, we are helpless to increase the volume of production.

Exhortations by the government to "produce and save," the stimulus of ambition, the prod of hunger, the pride of appearance, the keen stab of suffering on the part of loved ones—all of these ethical forces, and every other such imaginable, all alike have their edges turned and dulled into impotence against the steel-clad walls of this law. From it there is absolutely no appeal.

In short, we are constantly being exhorted to economize in the use of some commodity or other, such as coal, sugar, etc., upon the unquestioned assumption that the volume of production is either fixed, or is determined by some mysterious, unknown factor. Hence, it is argued, the less we use the greater surplus shall we possess, and hence the greater the tendency for prices to drop and supplies to increase.

Yet for all this assumption there is to be found not one grain of support in the economic facts. To the economist it seems really fantastic. Our volume of production is not fixed, but fluctuates widely, wildly, in response to purely human (although not individual, conscious nor voluntary) forces. In its determination *the prime factor is actually the current volume of consumption. Our rate of production is determined by the volume of our consumption, not our consumption by our production.*

Outlining briefly a complex situation which will be studied in detail as we proceed, it may be stated that, always remembering the fact that *only that may be consumed which first can be purchased,* the dependence of production upon consumption is one of the basic laws of economic equilibrium. Price, we shall see in the later chapter devoted to that topic—that is, average price-level in general, as contrasted with relative price of one commodity in terms of another—is not determined by supply and demand, and therefore controllable by the surplus of a voluntary supply over a voluntary consumption, at all. If that were so, our problems would be simple.

Instead, prices are determined first by factors, yet to be explored, which are all but independent of supply and demand. So is the purchasing-power of the people. The balance between these two factors then determines the volume which can be bought and consumed. This determines the volume which can be produced and sold.

None of these factors is voluntary, nor conscious, nor subject to control by exhortation. The people always desire to consume far more than they can. They always buy up to the limit of their purchasing-power. The producers always desire to earn and spend all they can. The restraint upon each of these functions has never resided in the will, but solely in those abstract, subconscious, relentless laws of economic action and reaction just outlined. These laws it is our duty to explore with care.

To-day, since businessmen are everywhere finding themselves forced to raise prices, and since no portion of society is troubling itself even to try—let alone succeed—in increasing the people's normal, current purchasing-power, naturally the aggregate volume of production, *in proportion to our normal productive capacity, is steadily upon the wane.* For this there is no remedy in sight, because there is no slightest prospect either of businessmen voluntarily and generally lowering prices, or of society's increasing the people's purchasing-power, in any normal, permanent and stable way. In the face of such a situation as that, exhortation to produce is silly.[1]

Our National Factory-system.—From this review of the basic economic principles which govern the broad processes of production, we must turn to a little further consideration of the mechanism through which they find expression in our daily life. What is the modern factory-system, as a national institution?

The real factory-system, as defined by the above broad considerations, is a very wide and inclusive institution. It is virtually co-extensive with modern industry, whether associated with what is commonly known as a factory or not. A railway, for instance, is a factory-system. Its raw material is coal, rails, cars, etc. These it grinds up into a finished product fit for consumption in the support of life, namely, transportation. In this same sense a telephone-exchange, a city street or sewer department, or a university, or a mission-board, is or may be a factory-system.

The four criterions for determining whether any given enterprise forms a part of our national factory-system or not are:

(1) Does it produce something which supports the life of the Ultimate Consumer,

(2) Do its members work without owning the tools, raw material and product concerned?

(3) Do they each work in undisturbed monopoly of their jobs?

(4) Does it extend credit, in the form of loaned appliances, to its members, without the exaction of interest thereon?

The World-factory.—Not only do the individual workmen of a given shop, or the several shops of a larger factory, co-operate to produce what supports the life of the Ultimate Consumer, under the factory-system, but all the separate factories of the nation, or the world, must be regarded as component parts of a unitary factory-system, *in so far as they interchange partly finished commodities without negotiation over price or ownership.* Of course, as a matter of fact, such negotiation always does accompany such interchange, when between factories which are separately owned. But what is emphasized here is that these two functions—the interchange of materials, on the one hand, and the negotiation, on the other—*are parallel, distinct, and not necessarily associated functions.*

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[1] Since this was written the commercial world, chiefly comprised by this country, England, France and Italy, has issued for the purposes of the Great War some two hundred billions of dollars' worth of governmental loans. The bulk of this enormous sum has been expended in America. It is the expenditure of this vast fund, by those fortunate enough to have shared in its distribution, which explains that lavish disregard of prices which excites comment on every hand.

But it must not be forgotten that all of this fund is fiat-money, printed off on paper against the assurance that patriotism would make it good. But patriotism is a thing which can wane, and the day for paying the interest upon this huge loan—amounting to some ten billions per annum in addition to the principal of the debt—has yet to make itself felt. (December, 1919.)

For it is obvious that between the workmen within every shop, and between the shops within every factory, most efficient interchange of commodities is now proceeding upon an enormous scale, quite without negotiation. It is also a common phenomenon for a shop which had previously been separate, and so conducting its interchange only after negotiation, to enter a consolidation; and after that *the same men interchange the same commodities, even more actively, yet quite without negotiation.*

Therefore, leaving to the future all debate as to ways and means, it is obvious that material interchange, on the one hand, and negotiation as to ownership or price, upon the other, are distinct and, to some degree yet to be determined, independent functions. What we are emphasizing for the moment is that *it is the worldwide co-ordination of material interchange, whether accompanied by negotiation or not, which actually constitutes the factory-system which supplies us with all which we consume.*

In the above broad sense, it is the office of the factory-system to extract raw materials from the soil, the sea, the mine and the forest, the world over, and to subject them, without raising question as to ownership or price, to those intricate processes of transformation, aggregation, transportation and subdivision which, interwoven in an inconceivable complexity, result in placing in the hands of the Ultimate Consumer all those things and services which he consumes in the support of his life. This classification includes everything which actually supports or elevates life—instruction, amusement and religious inspiration, just as much as the more tangible commodities—

wherever their existence is the result of an unbiased, conscious demand by the Ultimate Consumer.

Consumption.—Within the Ultimate Consumer these supplies of material and inspirational life-support lose their existence in the development of a fresh fund of human energy. But now this energy is biological and individual in character, rather than social or economic.

This individual energy is then destined for one of three goals. It is either re-invested in fresh productive effort, which produces all, or more than, it consumed. Or it may be morally dissipated in wrong individual life. Or it may, quite consistently with moral integrity upon the individual's part, be dissipated economically, through some mistaken idea as to the effect of certain sorts of social activity. It is this last sort of dissipation which interests us in this present investigation.

Modern Intricacy.—Both of these productive processes mentioned above—the transformation and transportation of originally raw materials—which were simple processes in the obsolete cottage-system, have now become incomprehensibly intricate. No mind except that of the specialist can fathom the complexities of the transformative processes occurring within even a single line of production. No mind can grasp it in its aggregate.

Transportation has also become inconceivably intricate. The number of geographically separated steps in production has multiplied tremendously. The Ultimate Consumers of the fruits of any particular factory-process are now scattered throughout the hundred million people of this nation, or the billion Consumers of the four quarters of the globe, as needles in a hay-stack. The aggregate amount, and the number of different steps, of transportation requisite for reaching them is quite beyond human comprehension. We may state it in figures, as we do the distances of the stars, but we cannot understand it.

Specialization and Interchange.—This modern intricacy of industry cannot be understood without a further word as to the visible aspect of the modern factory, aside from its peculiarities of organization. First in these aspects comes the feature of *factory-interchange,* and secondly *factory-credit.*

The modern factory, it apparently needs to be pointed out, is a field of the most constant and active *interchange of com-*

modities and services between individuals, each of whom specializes upon some small detail of the ultimate product. In the wonderful efficiency of the final results of the modern factory-system, individual "production," in the sense of what the workman does by himself at bench or machine, is quite a minor factor in its true production, namely, the finished output ready to be sent into the world. For this last depends primarily upon the maintenance, first, of the one condition requisite for efficient production—extreme *specialization*—and secondly, of the factory's most important active function—constant, rapid, easy *interchange* of materials and services, as the handmaiden thereto.

Specialization, of itself, has been known in industry ever since the feudal system collapsed, if not before. Men have always been specialized as carpenters, bakers, armorers, etc. But these specialized trades, in the old cottage-system, did not interchange. They sold direct to the Ultimate Consumer. In the factory-system, on the other hand, these trades interchange their output with each other, without sale or purchase.

Factory Co-ordination.—Thus in all factories of modern dimensions there exists a whole array of different shops—machine-shop, pattern-shop, foundry, tool-room, carpenter-shop, paint-shop, drafting-room, etc.—all united and co-ordinated into a whole by the Central Office; and between these several departments, as well as between the individuals within each department, occurs this continuous interchange of commodities and service which constitutes the life-blood of the factory. Every effort of the designer of the factory and of its superintendent, aided now by specialized "efficiency-engineers," is devoted to shaping this circulatory system so that it shall absorb the least time and effort, and shall be the least liable to interruption or derangement by the ordinary events of life.

In the most modern development of the factory this circulatory interchange is so rapid and constant that often the partly finished work is not even allowed to stop while any one workman performs his function upon it. In many factories the material is not touched by human hands during its progress through long series of steps in manufacture. Raw material enters at one end of the factory and comes out finished at the other—sheared into blanks, stamped into forms, drilled, turned, punched, threaded, spun, moved from building to building, baked, polished, painted, counted and packed in boxes in the meantime—all without human touch. The tools which do all these things usually move with the material while at work upon it, in order not to stop and delay the latter.

In factories where machines have to be assembled, as in the manufacture of automobiles, for instance, this circulatory process becomes even more striking. An endless chain, moving slowly along a wide, low bench, drags along, at first, only the first elements of a frame. As this passes workman after workman, each assigned to perform some single task, he steps forward and does it—adds a brace or a bolt or a rivet, or attaches a wheel—until soon the chassis is rolling upon its own wheels. Then slides down from overhead a tonneau which had been manufactured upon the same plan on the floor above, and the assembly begins to look like a car. Before it has reached the end of the building every detail and accessory has been contributed, the tanks have been filled with water, gasoline and oil, an inspector steps aboard, and the completed car rolls away from the end of the chain under its own power!

It is uncanny! The observer cannot long stand and watch these automatic machines, tossing out finished articles by the hundred or thousand per minute, or rolling cloth or photographic films into bolts continuously, night and day, by the mile —with floor after floor and building after building filled with such machines—that he is not forced to ponder where can be found the population to consume all that output. Yet the economic problem of the day is not to consume what we produce, but actually to expand our rate of production to meet our needs!

There is absolutely no limit to human demand. *Purchasing-power,* it is true, is often narrowly limited. It is commonly exceeded by supply, developing what is carelessly called "overproduction." But of real overproduction, in excess of true human demand, there has never been any evidence of a particle.

Factory-credit.—There is another feature of the factory-system the importance of which must not be inferred from its being mentioned last. This is its universal extension of *credit* to individual workmen, in material form—the arrangement whereby a costly machine-tool, or a railway-train, or a palatial steamship, or a hospital full of invaluable lives, is entrusted to a craftsman competent to handle it, who is given full autonomy in its control and use, for the good of the entire factory or community.

The use of the word credit in this connection is unusual, because of our habitual reservation of the word to indicate *commercial* credit—a special form of credit in general—a loan executed between individuals for the purpose of enabling one or both of them to acquire pecuniary profit. Yet it is one of the major lessons to be instilled by this book that this special reservation of the word credit is misleading. It is misleading because the fact will develop, as we proceed, that the only really useful function of the commercial loan or credit lies not in what pecuniary reward it may bring to either of the contracting individuals, *but solely in the fluidity which it contributes to the productive processes of the land, by enabling costly appliances to be placed more freely in the hands of those competent to use them productively, whereby the Ultimate Consumers are the better supplied with life-support.*

But because of this widespread misapprehension it must be emphasized here that the sole value resultant to society from the assignment of a railway-train, for instance, to its driver, is quite the same as that resultant from a commercial loan—in so far as the latter may aid the former process—in either case, the carriage of freight or passengers. That is to say, *the factory-loan is the pure, natural and only useful credit-function.* The commercial loan may or may not aid this sole true credit-function—the facilitation of life-support for the Ultimate Consumer.

Thereby pivots criterion as to the social value of the commercial loan. For only in so far as commercial loans may be found to aid the fluidity or volume of factory-assignments of appliances to workmen, may they be regarded as socially helpful. In so far as they may be found to hinder the true credit-function—factory-loans—they must be condemned, as an institution deterrent or destructive of production.

In other words, the factory-system, besides being all which has already been described, *is a gigantic arrangement for the extension of loans or credit to producers.* All the superficial appearances of its method of doing this, it is true, are contrasted diametrically with those surrounding the commercial loan. Yet the productive aspects of the two, so far as they have anything in common, are the same.

In this the factory, indeed, is a far greater machine for the extension of credit than is the bank, because of the number of its assignments. It loans to millions where the bank loans to thousands. Nor are its loans insignificant in amount per loan. For when, for instance, a seacaptain navigates to sea a liner worth several millions of dollars, which has been entrusted to his command, he has in reality contracted (for the good of society) such a loan as no bank would ever have granted him, in the form of money or commercial credit, had he lived next door to it all his honest, able life.

Factory and Commercial Credits.—Society thus relies, for its economic circulating-medium, upon two contrasted forms of credit-instrument. These two forms of paper instrument are alike in that, in each case, their sole useful function is the facilitation of the actual circulation of physical commodities or useful services between man and man. But in every other respect, they are diametrically contrasted both in form and in economic effect. These two forms are known, respectively, as *factory*-credit and *commercial* credit.

The paper instruments currently relied upon in the factory-system for carrying out this policy of loaning appliances or commodities to individuals for productive purposes are called *requisitions or shop-orders.* They never bear interest. They are never personally owned. Yet they illustrate in maximum, 100-per-cent purity and efficiency the only beneficial function attaching to any credit-instruments whatever, namely, the facilitation of the circulation of commodities between man and man, as an aid to production, interchange, specialization and distribution, and hence to life-supporting consumption.

The paper instruments currently relied upon outside the factory-system for promoting or permitting the circulation of economic energy are called, on the other hand, *interest-bearing securities.* While they appear in most diverse form, bearing many different names, yet they all fall under this broad title. They are all alike in these following peculiarities, namely: (1) They always bear interest. (2) They are always personally owned.

The Prime Function of Commercial Credit—Pecuniary Gain.—Indirectly and incidentally these securities, by their negotiable fluidity, do aid the actual circulation of commodities and service. But since this latter phenomenon is confined to the factory-system, from which commercial credits are rigorously debarred—because the factory has its own credit-system—these interest-bearing commercial credits are obliged to effect this aid through an indirect influence, exerted within a field distinct from the factory-system. This external field will be considered later.

Moreover, the influence of these commercial credits over the circulation or interchange of actual commodities is not merely indirect. It is so secondary and incidental that it is often difficult to ascertain whether it be positive or negative. For the prime purpose in mind in the issue of commercial credits is not to free some appliance for use, however vehement may be the asseverations that it is so, but to bring its owner a dividend, rent, interest-payment or similar pecuniary gain.

The truth of this statement need not rely, for proof, upon any observation of result, for that is physically impossible; nor upon proof of the motives of the issuer, which is psychologically impossible. It rests, instead, upon the universally unquestioned fact that *the valuation of these commercial credit-instruments in exchange, and hence their useful fluidity, depends solely upon this pecuniary return.* If they fail in it no one will consent to buy, own or use them, however dire may be the people's need for the appliance which they control.

Hence this must be their prime function. Whatever aid they may happen to lend to the actual circulation of life-supporting commodities must be secondary and incidental to this, their prime function—pecuniary gain. We shall see later that this secondary function can be performed only to the degree which proves to be compatible with a maximum performance of the prime function—private profit.

Credit and Interchange.—So important is the natural function of any circulatory system of paper credit-instruments in the life-supporting processes of a community, wherein they make possible that parallel circulation of materials and services which are vital to the life of the economic body, that the next chapter will be devoted exclusively to the topic of Credit. In the meantime it is important to emphasize the broad fact that this interchange of materials and services, which is as vital an economic function as is bare manufacture itself, is one of the most prominent functions of the national factory-system. Indeed, in modern life it is by far the most vital portion of production.

The factory-system performs this circulatory function far more actively than any market does, in spite of the common regard of the latter as the sole habitat of interchange; for the market bargains much and trades little, whereas the factory trades all the time, and never wastes any time or effort in bargaining at all. This fact is made possible by the fact that the factory-system continually extends credit upon an enormous scale, probably far surpassing the banks in aggregate, and that ownership-in-industry is religiously excluded from its borders.

The Personnel of the Factory-system.—This great co-operative, monopolistic, non-owning, free-credit, national (or world) factory-system method of industry now enrolls, it is to be noted, a major portion of our active population within its ranks. *More than nine-tenths of all our people now actually work, live and die—and have done so for a generation or two—under a system from which was eliminated at the start all hope or promise of their ever owning aught beside that which they may purchase outside the factory for Ultimate Consumption; one from which all competition for the securing of work has been rigidly excluded; one in which the use of costly appliances is continually being allotted to propertyless men, without the exaction of interest; and one in which interchange of materials and service, under the guidance of a Central Office, is everywhere and at all times most active, yet without the slightest accompanying negotiation as to price or ownership.*

Yet this great and most efficient propertyless system—so diametrically opposed to that idea of license to own anything in sight, and of sacredness of everything against use except through ownership (or upon payment of interest thereon), which has come to be misunderstood as the essence of property-rights—was first inaugurated, has been steadfastly maintained, and is being sedulously extended, not by the radical element of society, but *by that very employer-capitalist portion of society which is daily asserting most vociferously the sacredness of the institution of property.*

There is some deep-seated confusion of mind here which must be clarified, before any of the economic issues of the day may be understood. To those who regard all propositions looking toward any restriction of the license to own property-in-

industry as revolutionary, or anarchistic, or as originating only with irresponsible, unpatriotic agitators, this historical aspect of the modern factory-system, originated and controlled by the capitalist-employer class, calls for most careful consideration and courageous avowal.

CHAPTER V

CREDIT

Catalysis.—Credit is the great economic catalyst. Even in physics or chemistry catalysis has not been explained in detail, although continually being relied upon in greater measure for results. But in economics we can follow its action somewhat further in detail, aided by the following simile quoted from some unknown wit.

In marital affairs no new family can be inaugurated without the consumption of a bride and a groom for each family. The creation of an hundred families requires the supply of an hundred brides and an hundred grooms; and none of these may be used over again—at least, without detriment.

Similarly, no new family can be inaugurated without the presence and activity of a minister, or equivalent. His function is indispensable.

Yet here the parallel between principals and minister ends; for the development of an hundred weddings, uniting an hundred brides with an hundred grooms, still calls for only one minister, and at the end this minister has not been consumed, nor even depreciated. Given reasonable time, he can continue indefinitely to unite couples into indissoluble wedlock.

In this the minister is a *marital catalyst.* For a catalyst, in physical or chemical action, is a substance which by its presence makes possible some interaction between other substances or energies, yet without itself taking any part in the phenomenon, in the sense of being consumed or impaired.

In electrical engineering, for instance, magnetism is the catalyst. Steam or water-power cannot be converted into electric current without the aid of magnetism. Yet the magnetism is not consumed in the process.

Economic Catalysis.—Credit is the great economic catalyst. Credit, in its broadest sense, is a simultaneous, social attitude of mind expressed in economic form—an abstract belief on the part of the community in the usefulness of certain tokens, as instruments for enabling social co-operation in search of future returns to be had through the use of these tokens. Yet the tokens themselves are not consumed nor impaired by this use. Still less is the public sentiment which gives them value.

Thus, imagine twenty men, each of whom stands ready to purchase one dollar's worth of goods or service from some one of the others—each having confidence in the value to him of the goods or services desired, and in his ability to develop, with their aid, an equivalent amount of life-support in return. Imagine these men as standing in a circle, each man next to his would-be creditor. The aggregate mutual indebtedness of the little community is then, or it might be, twenty dollars. The actual circulation of economic life-blood—interchange of commodities or service—might be twenty dollars.

But if no one among the twenty happened to possess a dollar's worth of gold, nor any other substance the value of which was agreed upon by all, making it universally acceptable as a means for payment, then trade is impossible. *All are paralyzed socially and economically, although each is well able physically to serve or supply.*

In that case each must remain content with his own peculiar individual productivity. Yet this, we know from practical considerations, is real starvation to-day, in comparison with what may be enjoyed through co-operation in exchange.

Barter.—As to barter, that may be excluded from the simile. because barter is also impracticable in any modern community, and would be impracticable in the illustrative community of twenty if it had not been supposed that all were equally indebted simultaneously, to the amount of one dollar each.

The Monetary Standard.—Nor need the argument be diverted here into any debate of the essentials of a money-basis, whether gold, bimetallism, multi-standard or what. It need merely be explained that gold is now the accepted world-basis for money.

Earlier panics and hard times for the people, it is true, were due largely to defects in our currency and banking systems. They were distinctly currency-panics, characterized by widespread bank-failures and the elevation of gold to a premium.

But now this has virtually ceased to be true. The panic of 1907 involved hardly one-tenth the bank-failures of that of 1873, in spite of the larger number of banks, and was accompanied by scarcely any appreciable disturbance of money-values. The adoption of the gold-standard between those two panics, and of the federal reserve banking-system since the last, has virtually removed the bank and the currency from the list of sources of economic danger—except in so far as the banks still constitute one section of active and passive commercialism, in the same sense that a corner-grocer or a manufacturer may also be one, in the way defined and condemned herein.

It is for all these reasons that the institution of credit will be analyzed here without entrance into debate as to the exact nature or the minor imperfections of the gold-basis and the present banking-system. Whatever these may be, the imperfections of our credit-system are far greater.

Credit-instruments.—Let it now be imagined that, in our community of twenty men, one man did possess a single dollar's worth of gold. Then immediately the twenty dollars' worth of debts can be paid by means of this one lump of gold, which is passed from man to man as rapidly as possible, being equally acceptable to all.

Or, to introduce paper-currency, the gold may be supposedly placed in the custody of one man, who issues a slip of paper which he agrees to accept in exchange for the lump of gold, whenever it may be presented. The exchanges may then be transacted with increased facility, due to the superior convenience and cheapness of the paper; and the paper may be renewed, when worn or soiled, with a thousandth part of the cost of replacing the gold itself.

The Function of Credit.—Thus, by the simple fact of *public agreement upon and faith in* the gold as a circulating medium, the all-important factor of an economic catalyst—credit—has been added to the community. The twenty men previously paralyzed industrially have thereby been galvanized into economic activity, usefulness to each other, and individual happiness. All this has been accomplished, to the extent of twenty dollars' worth of interchange each time that the dollar can be passed around the circle, by a single dollar's worth of gold—or perhaps by a mere slip of paper which all believe to be exchangeable for gold.

Yet, in the accuracy of thought of a scientific analysis, it must be remembered that the gold is just as much a credit-instrument as is the paper slip issued against it. For the gold, of itself, cannot support life. It is merely as an accepted symbol of the *belief or credit,* on the part of each man that his neighbors are capable of serving him usefully, that the gold has value.

But the same is true of the paper. Both gold and paper are merely credit-symbols. It is only as an unfortunate convention or tradition that we have styled the paper a "credit-instrument," in supposed contrast with gold, which latter is regarded as having some sacred value inherent in itself.

Stability of Credit.—It may next be supposed that the community of twenty observes that, since there is little likelihood of everyone's wishing to exchange paper for gold at the same time, *more than one slip of paper may be issued against the single lump of gold without harm.* The labor-cost embodied in the gold then determines the valuation of each slip of paper; and this valuation it usually retains, in spite of the fact that everyone knows that if all demanded gold at once only one could be satisfied. Occasionally, however, this faith collapses, and then there occurs a currency-panic, with gold soaring to a premium.

Thus the relative quantities of gold and paper affect the *stability* of the latter, but not the *price* of either. When paper-money depreciates in valuation, through its issuance in too great quantity, it is not as a commodity-value that it depreciates, from mere plentifulness; but solely because public faith in the chances of its not being presented for gold, beyond the quantity of gold available, wanes as the volume of paper-money increases.

A plentiful commodity—including gold as such—depreciates because of its ease of production or acquisition. A too plentiful token-currency depreciates because of the growing chances that it may prove not to be money at all. The first is a symptom of labor. The latter is one of credit, or belief.

Thus the limits in proportion of paper to gold which must be observed, in order to maintain a reasonable stability against currency-panic, obviously depend upon the general peace and stability of the economic world. Faith in the currency depends, both positively and negatively, upon a general atmosphere of faith in other things economic.

Until men learned to be wise and conservative in guaging this danger of collapse, which they have now apparently succeeded in doing, general economic stability depended largely upon stability of the currency. Commercial panic ensued only after currency-panic had developed.

Now that our currency has been thoroughly stabilized, general economic stability has been freed from menace in that direction. But it has simultaneously incurred threat from quite another factor, namely, *the decreasing purchasing-power of the dollar.* That factor has long been at work obscurely, it is true; but now for the first time it is left bare and alone, to work its will upon the situation, without regard to the strength or weakness of the currency.

The Dual Nature of Credit.—To return to the illustrative community of twenty, under the more advanced plan of issuing more than one slip of paper against the one dollar of gold, there may be twenty such slips, it may be supposed. Each man may then possess one paper dollar. To that extent he commands real wealth, although he owns no gold, nor anything else useful in the arts of life-support except his hands and faculties; although, too, his slip of paper may conceivably resume its trifling value as such at any time, if conditions be too violently disturbed.

Yet each man in reality cares little or nothing about the gold itself. What he desires are the services of his neighbors, for which he is anxious to exchange his own. Yet this he cannot do unless all agree, first, upon some one thing, such as gold, which will always be acceptable—merely because it is fairly uniform in cost of production, not subject to corrosion or decay, subdivisible or aggregable without deterioration, compact per unit of value, and useful to a slight degree in the arts.

Secondly, all must agree upon the issue of certain slips of paper in representation of this gold, the amount of such paper-currency being in excess of the gold, yet with proper safeguards against abuse. The gold then contributes value to the paper; the paper contributes fluidity to the gold. But neither of them possesses any appreciable value to the community, *except in so far as the community contributes that value by its entertainment of a sentiment of simultaneous faith in each other.* This faith is called intangible economic credit.

Economic credit, therefore, plainly consists of two factors. The primary of these two factors is the intangible sentiment of faith felt by the average citizen, partly in the individual character of his fellows, but most of all *in the general social* *conditions of the moment,* which unite them all in relationships which may be good or bad *quite independently of such qualities within each individual.* The secondary factor in economic credit is the tangible instrument, or system of instruments, relied upon to give public expression to the intangible sentiment.

In such a dual system as that, failure may occur from defects either in the intangible sentiment or in the tangible instrument. In the earlier history of our land periodic collapses of credit and economic interchange were plainly due to glaring faults in the tangible instruments of credit, begetting consequent lapses in the intangible sentiment. But now, in so far as concerns merely the currency, and the banks in their function of reservoirs thereof, this trouble is apparently past.

On the other hand, if history is to repeat itself in the near future, in any such a collapse of intangible confidence through a fault in the mechanical instruments now relied upon for its expression, it must be due to defects in the instrument which modern finance has substituted for the currency of earlier days, while it was reforming the latter. For we now no longer rely, to any appreciable degree, upon the circulating instruments of credit which only a generation ago were still prominent as such, and which two generations ago formed virtually our sole medium for interchange, namely, bank-notes and currency.

Interest-bearing Securities.—Instead, our present reliance is almost wholly upon *privately issued, interest-bearing securities.* Although these were nominally present in the financial system of 1850, and although currency still forms a part of it to-day, yet during the interim the relative proportions of these two have been completely reversed. In 1850 bank-notes and other currency formed the mainstay of commerce, with securities obscurely in the back-ground; and at that time it was the defects in our system of state and other banks, with their over-issue of notes, which alone threatened economic stability.

But to-day interest-bearing securities are relied upon as the major portion of our circulating-medium, to a proportion exceeding currency certainly by a tenfold, and perhaps by a twenty-fold ratio. It is they, and not our currency, which we must fear.

Mr. William Ingle, chairman of the recently created Federal

Reserve Board, in an article upon "Credit Reform" contributed in 1916 to the American Academy of Political Science, says:

> "In the presence of conditions in this country approximating normal, money or currency cares for just about four per cent of the average daily amount of its business. Credit, in open account or credit-instruments such as checks, notes or bills of exchange, liquidates the remainder, either immediately or at some future date. Seriously disturb this usual relation and for any reason impose upon business a settlement in cash of ten per cent of its volume, and we have panic, whether severe or mild being dependent upon conditions developed from the use, or more properly the abuse, of credit."

Yet in the list of credit-instruments given by Mr. Ingle he makes no mention of stocks, bonds, mortgages, insurance-policies, warehouse-receipts, etc, which constitute the chief basis for the circulation of credit in the financial district. This is probably because he had in mind only retail transactions, a class which employs these latter forms of credit-instrument to an inappreciable degree.

But in the downtown business of financing the expansion of the larger corporate activities, stocks and bonds, etc., constitute virtually the sole reliance for fluidity. Probably no one can say positively what is the exact ratio to-day of credit-instruments to currency in the business-world, but it is safe to assert that it cannot be less than twenty or thirty to one. It may easily be fifty to one.

As this fact has gradually come into being, the function of the banks has been correspondingly transformed, from their pristine concern merely in the maintenance of a reservoir of currency, with means for financial exchange with distant points, into one concerned primarily in the making of loans, discounts, sales or purchases of interest-bearing securities, notes, etc. The banks have now become distinctly *dealers or merchants in credit,* making their profits from its supply to the public quite as a grocer does with sugar. The subservience of the people to the banking-system now rests scarcely at all upon the latter's control of our stock of gold, of which we now make little use, but upon its monopoly of our stock of fluid credit, upon which the very life of industry is increasingly coming to depend.

While it is true that the banks have always dealt in credit, to a degree—and to that broad fact can be attributed their every past failure—yet the manner of their doing so, and the instruments created for the execution of that policy, have been basically transformed. Thus the banking-system has recently incurred, during the very period of its reform from the currency-follies of its youth, this new and greater need of reform, inherited gradually and subconsciously from its self-indulgence in the merchandising of credit in modern form, however conservatively restricted.

It is to trace in outline this gradual transformation in our tangible system for expressing our economic faith in each other which forms the topic for this present chapter. In every phase of that history, we believe, it will appear that it has always been a defect on the part of the tangible instrument which has taken the initiative in causing a collapse of the intangible public sentiment of credit. But when it came to recovery, it has always been the intangible sentiment which took the lead in building itself up again—through that mystic force of growth which is inherent in all forms of life—so soon as some remedy of the original disturbing defect had become apparent.

The Transforming Power of Credit.—Returning now to the imaginary community of twenty, it is seen transacting all its interchanges of service and commodity by the circulation of mere slips of paper, representing an unseen and little wanted lump of gold. These slips now travel as rapidly as possible from man to man, or rest with one or another as his stock of reserve-money. With this tangible system of mutual credit in operation, all are busy, fed and happy. Without it, all are virtually idle, and starve in misery.

Yet, after such an important and active function in the maintenance of the current life of the community, each slip of paper remains in the hands of the man who first held it, unimpaired in usefulness! Such is the marvelous potency of the mere presence of mutual credit in modern economic relationships. The system of paper slips (and the public's faith in them) is the absolutely necessary and all-powerful *economic catalyst requisite for social life.* Credit is as essential in the body economic as unnutritive salt and water are in the individual human body.

The extent to which this situation of the little community of twenty must be magnified, before it becomes possible to picture the absolute dependence of our modern communities of tens, hundreds or thousands of millions, not only in their efficiency of provision of daily life-support but in the basic stability of their governments and their mutual civilization, is beyond the possibility of immediate expression in words. So startling is the contrast between a community possessing an adequate system of credit-instruments, and the same people lacking it, that it is difficult to convey to the reader. Those violent contrasts which we observe in history between impoverished, impotent societies, and that same population, often only a few years earlier or later, in a state of affluence, are only this.

In social energetics poverty does not arise necessarily from the destruction of tangible wealth, as in war, nor prosperity await the slow accumulation of visible property. Instead, the transition occurs suddenly, in either direction, according as adequate, acceptable credit-instruments, in proper volume, appear or disappear.

Thus France, in 1871, was poor to the extent of famine. Dog-meat commanded fabulous prices in Paris. The city was invested by Prussian troops, and a huge indemnity must be paid before they would leave.

Yet Thiers accepted the situation with courage, issued credit-instruments wisely, stood back of them with determination, and the people responded with faith and works. Within a few years the indemnity had been paid, the soil had been freed of foreign troops, and France had become the banker of Europe.

The Confederate States of America, on the other hand, had been left by our Civil War, only five years earlier, in a similar condition. Their country had been laid waste in some parts, it is true, as France had not; but the South was an agricultural district, and therefore not so sensitive to destruction of appliances as a thickly settled, industrial region like France. Moreover, the South had no indemnity to pay.

But the South had the commercial folly to *repudiate its war-debts.* Hence credit was lacking, cash feared to enter the country, there was no circulating-medium upon which to conduct trade, and for decades the land was paralyzed by its forced dependence upon barter for its feeble domestic interchange. Both its foreign intercourse and its internal productivities were asphyxiated by its lack of a circulating credit-medium.

Had the South but shouldered its war-debt with shrewdness as well as confidence, issued credit-instruments to cover it, and announced its determination to pay, it would immediately have possessed a huge fund of circulating-medium. This would have liquidated the blood in its economic veins, brought in cash from the North, and landed it in solvency many years before it actually arrived there, some four decades after the war.

Moreover, according to the best traditions of modern finance, *it would never have had to pay the principal of this debt.* By paying the interest regularly the principal could have been refunded periodically, in ever increasing volume, as a suitable opportunity for the South's financiers to invest.

The History of Credit.—In order to secure a proper perspective at least a glance must be taken at the history of this all-important social feature, economic credit. Yet a glance will suffice, for its history is comparatively brief. While prototypes may be found centuries back, yet credit in its modern sense and effect is very much a modern institution.

In medieval days business could be, and had to be, transacted either by barter or by cash—either coin or bullion. There were no banks. Individuals, usually of the Jewish race, assumed their functions as best an individual might. Apparently, after the disappearance of the ancient banking institutions of Babylon, Phœnicia, Greece and Rome, it was not until the twelfth century that the first real bank made its appearance in western Europe.

Even then these banks were wholly magazines of deposit, issuing no notes, knowing no check-system and making their loans to titled individuals rather than for the promotion of industrial enterprise. Mr. Robert Howe, in his "Evolution of Banking,"[1] states the situation as follows:

> "Modern banking can be said to have had its origin with the establishment of the Bank of England in 1694 and the Bank of Scotland in 1695. Previous to that date the banks, such as the Bank of Venice (1191-1797), Bank of Genoa (1407-1797), Bank of Hamburg (1619), Bank of Stockholm (1668-1754) and the Bank of Amsterdam (1609-1790) were banks of deposit. Payments in business-transactions during the medieval period were made by means of coins; but the inconvenience of handling and storing large numbers of coins, with the risk of loss through overvalued or debased coins

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[1] Permission of C. H. Kerr & Company, Chicago.

> and the risk of theft, led to the establishment of these banks of deposit, where the coins were valued once for all and were then locked up in the bank-vaults and never withdrawn, but the title to the same was transferred on the books of the bank. . . . The banks of deposit made no loans, but their income was derived from a charge that was made for each transfer of funds on the books of the bank.
>
> "Our modern banks are Banks of Discount, as distinguished from their predecessors, the Banks of Deposit, and have given an enormous impetus to commerce. They have been able to do this because they can and do create credit that circulates the same as money, and in a far more convenient, safe and economical form."

While there were doubtless many minor instances of the private devising of instruments of credit, one of the earliest and virtually the first governmental system of credit was that of the "tallies" which played so important a part in English history. Howe is quoted again:

> "One of the most interesting instances of the use of representative money is found in the English Exchequer tallies, which circulated in England for over six hundred years. These were adopted as a means of financing the English treasury by the fourth son of William the Conqueror, who ascended the throne as Henry I in the year 1100. The tallies were of wood and were issued by Royal Warrant. All who served the King or State were paid with them. Supplies for the Royal Household and army were purchased with them and they circulated among the people as money and were used as such in exchanging commodities. They were four-sided rods of hazel or linden wood about an inch in diameter. The amount due from the State to the creditor was designated by notches cut into one of the flat sides of the rod. . . . The amount was also written in ink on two opposite sides. The rod was then split by knife and mallet lengthwise through the notches. One-half of the stick, showing the inscription in ink and one-half of the notches was given to the creditor and one-half was placed in the treasury. . . . They did not pretend to be based upon gold or silver. They were redeemed by the Government only by being accepted in the payment of taxes. When the time came for the collection of taxes . . . they were matched with the counter-tallies and where the two edges fitted each other they

> were said to 'tally.' After being accepted in payment of taxes they were broken in half and were thus cancelled.
>
> "When the Bank of England was established in 1694 there were about $70,000,000 in wooden tallies in circulation in England. The Bank enjoyed the privilege of issuing paper-currency for the first time in England. . . . The use of the paper bank-notes and the exchequer bills gradually displaced the wooden tallies in the more important business-transactions, but it was not until 1783 that their use was abolished by act of Parliament. In spite of this act their use was not finally abandoned by the government until 1826."

Up to about 1780 the Bank of England enjoyed a monopoly of the privilege of issue of bank-notes as a form of credit for circulating-medium; but at that time the check-system was devised by other banks, as a means for competing in this service, and soon came into adoption. As Howe says:

> "The banks that began to be established in the United States about the year 1800 followed exactly English methods."

Stock-trading.—Up to this time, too, public subscription to the stock of corporations was virtually unknown. It is true that bank-shares were bought and sold, but the owners of such shares were still a small minority, although already a step away from the more exclusive ownership of banks of earlier days. It is also true that public speculation in such corporations as the great "South Sea bubble" in the eighteenth century was one of the picturesque signs of early progress toward commercialism. But such enterprises were purely gambling-swindles, based upon property in unknown parts of the world.

The second half of that century also witnessed the formation of the great "British East India Company," which until 1833 enjoyed complete monopoly of trade between England and India, including largely the China trade; and in this the public invested. But none of these limited instances parallels in degree our modern reliance upon public trading in the securities issued by corporations performing every local or domestic service.

While the growth of public stock-trading was gradual, of course, yet its modern form really arose in this country only about the year 1840. At that time the recent invention of the steam-passenger-railway, in 1829, and the inception of steam-transatlantic service in 1837—following the earlier growth of the factory promoted by stationary steam-power and the hydraulic turbine, and the rapid development of canal and river navigation—had initiated an outburst of enterprise in building facilities for communication which created heavy demands for credit. At first this was secured, as a matter of course, by governmental (federal, state or local) issue. But these public enterprises failing financially, private enterprise and credit replaced them, and the modern system was fairly inaugurated.

It was in pursuance of this original tradition that, until almost the close of the nineteenth century, public opinion contented itself almost entirely with speculation in the securities issued by railway or mining corporations; and the history of "wild-cat" railroads and "salted" mines which followed is as variegated and tragic reading as one could wish. But about 1890 the "industrials"—securities issued by corporations conducting the utmost variety of manufacturing or other service—also became fully recognized as fit subject for public speculation; and since then the modern system of negotiable commercial credit may be regarded as completely in force. It is only since 1900, however, that the rate of issue of such securities has proceeded at a rate which may be called modern.

Returning to the banks, while their part in public credit was at first confined to the issue of bank-notes, loans being confined to personal relationships on the part of members of the bank, yet gradually the general business of loaning against deposits by the bank itself, of purchasing mortgages, investing in bills of exchange, promoting bond-issues, discounting private notes and trading in "commercial paper" of all sorts by the bank itself, has become the major interest in modern banking. Since the opening of the present century this aspect of banking has completely revolutionized the standard practice in financing new corporations, big industrial enterprises and vast governmental needs.

The modern social problem cannot possibly be comprehended correctly without recognition of this recent transformation in our financial foundation—credit. Again quoting Howe:

> "At first the liabilities of the banks for notes in circulation far exceeded the liabilities under the head of deposits; but,

as the use of bank-checks in place of currency grew, the ratio changed and has resulted in the present condition, where the circulation-liability of the National Banks is about $750,000,000 while the liability to depositors is upwards of $15,000,000,000.

"A most profoundly erroneous impression is made on the mind of the public by the published statements of the amount of liabilities of the banks under the head of 'Deposits.' It is almost, if not quite, universally believed that the so-called deposits are deposits in actual cash, while the truth is, in so far as the deposits exceed the cash on hand, they are the proceeds of discounted commercial paper. Banks do not loan money. They loan credit. They create this credit and charge interest for the use of it."

Classification of Forms of Credit.—The present credit-system, therefore, may be taken as made up of the following general classes of credit-instrument, in chief; but a complete list of all the varied forms of paper representing merchandise or the hope of merchandise, or profits or the hope of profits, which are made the subject of negotiation and loan in the financial world, would be unending.

(1) Governmental paper-currency, issued against gold coin or bullion, with a minor proportion of silver-certificates.

(2) Bank-notes issued more or less directly against the same base, as specified by law. The stability of these two classes of instrument depends, first, upon the proportion of gold to paper issued against it, and secondly to the general stability of other economic conditions. In a quiet, prosperous period the proportion of paper to gold may be high without collapse; but as disturbances arise from without, these will find reflection within, in a collapse of the currency, unless the proportion of paper to gold is low enough to reassure even the timid. As already noted, we are not likely to have again a panic due to the inflation of paper currency, although we are most likely to have one from the over-expansion of other paper instruments of credit.

(3) Governmental bonds: federal, state, county or municipal. The stability of this class depends upon public faith in the ability of the government to tax the public itself to the amount requisite for redemption. In this indirect way this class falls into identity with the following classes, in resting upon the general wealth of the land. But it must not be forgotten that the stability of governmental bonds stands also upon the public

faith that the money expended under them went for public improvements which are wise, productive and profitable. The widespread doctrine that a governmental tax is a pure loss to the tax-payer is most misleading. Most taxes are investments much more wise, from the viewpoint of good to the greatest number, than any investments in business.

(4) Bonds issued by private corporations, based upon mortgage of plant and earning-capacity.

(5) Stock and short-term notes issued by private corporations, based upon earning-capacity.

(6) Bank-loans, issued against deposits or against the above securities.

(7) Loans by pawn-brokers or private capitalists, based upon merchandise.

(8) Mortgages upon land, buildings, etc.

(9) Savings-bank deposits, postal savings, etc.

(10) Certificates of building and loan associations, benevolent societies, etc.

(11) Insurance-policies and loans thereon.

(12) Letters patent, copyrights, etc.

(13) Bills of exchange, warehouse-receipts, etc., based upon merchandise and usually endorsed by two names—called "commercial paper."

(14) Checks and clearing-house certificates, issued against deposits.

(15) Promissory notes issued by private corporations or individuals, based upon the most general aspect of the issuant's business-record and prospective ability to redeem—sometimes endorsed by two names and called "commercial paper" and sometimes merely "one-name paper."

(16) Open accounts between seller and buyer—still more vague in their basis upon the general probability of their being redeemed.

Beyond this general classification lies an intricacy of detail of "margins," "shorts," "call-money," discounts, etc., etc., into which we need not enter. In some respects some of the above issues of credit-instrument are duplications of others—as when, for instance, the United States postal savings-bank pays a small interest-rate to the depositor and then redeposits the savings in a private bank paying somewhat higher interest, against which deposits the private bank deals in securities paying a still higher rate. But this duplication is only partial. It is mentioned only to assure that it has not been overlooked.

Credit-agencies.—In order to place before the reader the aspect in which all this intricate system of credit-instruments appears to those whose lives are spent in its maintenance, before drawing our own picture of it from the Consumer's point of view, the following quotations from financial authorities are offered. First from Mr. Ingle, quoted above:

> "While credits in one form or another, aggregating an enormous total, are granted by sellers to purchasers, the banks of the country are, shall we say, the impersonal agencies which, in undertaking the responsibility of collecting free capital into reservoirs, loan it to that part of the business-public needing accommodation. The measure of ability of any bank to extend credit, generally speaking, is the net liability of such bank to its depositors. Withdraw deposits to any material degree and a bank is required to demand payment of outstanding loans or reinforce its cash by borrowing. In normal times and in local situations either remedy is usually available, but when times are out of joint, as for instance when over-expansion of credit becomes all too apparent and is evidenced in country-wide conditions, this ability either to collect maturing obligations or to borrow in order to meet deposit-withdrawals is seriously abridged or altogether lost. As actual cash-reserves held by the banks hardly average more than seven per cent of their deposit-liability, it is easily seen that a relatively small demand for the payment of deposits in actual lawful money must so deplete their resources as to compel suspension of payments, something which has occurred several times, making it imperative to resort to extra-legal and unsound practices, tolerated simply as a matter of immediate necessity. . . . For many years this country, in developing its business of all kinds and, under the impetus of keen and oftentimes unsafe competition in very many lines, in too heavily discounting the future, has been greatly abusing credit-rules accepted as sound by every other commercial nation. It is true that in owning only a most incomplete and inefficient code of banking-law, which provided no means of serving many and most important situations requiring the aid of the money-lender, the commercial banks have been called upon and used in a manner never contemplated fifty years ago. . . . Years ago, when a merchant sold a bill of goods he would receive from his customer either a note or acceptance for the value of the invoice, when both parties to the transaction would expect the account to be closed by payment of the obligation at its stated maturity,

> made in conformity with trade-practice. Such a merchant when needing credit would offer a bank his customers' obligations bearing his endorsement, two-name paper reflecting a bona fide sale and purchase. As the result of competition, which took the form not only of price and profit cutting but of settlement-terms, the one time usual note or acceptance has practically disappeared from many lines of trade, and in its place we have on one side of the ledger "open accounts due from customers," while among the liabilities appear "bills payable," the direct and generally unsupported obligation of the merchant. Such notes issued against the general assets of their makers are what is known as "single-name paper." If one could be sure that the average merchant would be proof against the temptation either to over-trade or to inflate reported value of assets, a single-name note against liquid assets, such as good book-accounts, would be just as good and as readily collectible as would be the note of one or more debtors endorsed by the merchant. Unfortunately, however, a very great number of traders do not limit their borrowings to an amount fairly related to the total of quickly realizable inventory and book-accounts made for settlement at a determined date. . . . Many merchants enjoying good credit on their single-name paper are averse to returning to old-time practice, as under existing conditions such merchants really are doing a banking-business on quite a generous scale. They are able to borrow on close terms, when they extend open credit to their customers on terms which many times yield not only two to four per cent profit on the credit itself, but higher prices for goods than would otherwise be paid. Not only is the banker's field thus usurped, but the customer is trained to postpone pay-day. . . . In practice the banks handle a great volume of single-name notes and only an insignificant quantity of real commercial paper, . . ."

Mr. Edmund D. Fisher, Deputy Comptroller, City of New York, in a recent address upon "The Relation Between Fixed and Fluid Credit," before the American Bankers Association, said:

> "Credit is the chief element in modern exchange through the credit-currency of banking. . . . It is the medium through which commodities are virtually enabled to exchange themselves in terms of actual money. . . . Recent banking practice has developed large volumes of deposit-currency based upon fixed forms of credit, and the use of this currency has dis-

> turbed price-relations. . . . Through the *loan, deposit* and *check* process of modern banking, the proceeds of loans upon shares of corporate business and on dwelling-houses and other evidences of fixed value are added to the volume of basic currency. . . . The vast growth of the non-commercial forms of banking-enterprise during the last fifteen years, manufacturing deposit-currency mainly through loans on the collateral security of new corporate enterprises, probably has been the chief element in price-inflation."

Finance and Ethics.—A glimpse at the corresponding change which has come over our ethical standards to correspond with the progress in banking-methods is given by Professor E. D. Howard, of Northwestern University, in his "Money and Banking":[2]

> "It is a curious fact that this most vital part of civilization and commerce—money and banking—has not been understood and appreciated until recent times. A few centuries ago the merchant was regarded with suspicion and placed not far above the thief in the social scale. The merchant who bought an article for $1 and sold it for $1.50 was thought to have robbed the purchaser of fifty cents. The banker who loaned money at interest violated one of the laws of the church which forbade taking of usury, as interest was called at that time."

Strange how prone is the most serious and careful of modern public thought to regard those early and primitive moral scruples as correct! We are rapidly re-approaching the point, not of saying that all merchants are thieves, but that if their profits really represent a useful service *then it is inconceivable that they should object to receiving their pay in the form of a salary* proportioned to the Consumer's estimate of the service performed.

Insurance-credit.—If doubt should exist in the mind of the reader as to insurance-policies being a part of the credit-system, the following quotation from "Relation of Life-insurance to the Credit-fabric," an article by Mr. A. B. Hepburn, Chairman Board of Directors, Chase National Bank, in Rand-McNally's Bankers' Monthly for March, 1915, will reassure:

> "The aggregate resources of the New York Life, Mutual, Equitable, Prudential and Metropolitan were in 1879 $166,-

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[2] Permission of Alexander Hamilton Institute, New York City.

> 296,822, and their aggregate outstanding insurance was $603,553,606. According to their reports for 1913 the aggregate resources of these companies had grown, in the intervening thirty-four years, to $2,694,591,746, and their outstanding insurance had reached the enormous total of $7,325-711,135 of ordinary insurance, and including the industrial insurance of the Metropolitan and Prudential, the grand total reaches $10,566,042,247.
>
> "I have presented these figures in this way in order to emphasize the fact that these institutions are the greatest investment-banks in the world; and indeed they practice a measure of commercial banking, since life-insurance companies have adopted the policy of loaning to the insured upon their policies as collateral. . . . Life-insurance companies and banks both deal in credit and subsist upon credit, and both draw from the public the financial resources with which they in turn serve the public."

These data, reduced to terms of population, show the relative increase of insurance of this sort *per capita* in Table 7. It is certain, however, that this average rate of increase has not been evenly maintained. Since 1898 it has undergone marked acceleration.

TABLE 7

Growth in Insurance (Dollars per Capita), 1879 to 1913

1879.	Resources	$3.39	Insurance in force	$12.30
1913.	"	27.67	" " "	108.50
Average increase per annum, in per cent:				
	Resources	6.4	Insurance in force	6.6

Aggregate Credit.—The task next in order—that of a statistical measure of the recent increase in aggregate volume of credit from all the sources listed above—is again one fit for an entire corps of professional investigators, publishing a special treatise, rather than for a private author with only a few pages at command. Yet here again the need is imperative for doing the best possible within the limits of a single chapter.

The prime obstacle to any accuracy in estimate of the volume of credit-instruments afloat at any one time is, first, their constantly varying market-value, and secondly, their apparent duplication. Thus a given amount of gold, or value of plant, may serve as a basis for the issue of bonds or stock, or both, to an aggregate face-value far greater than the value of the basis.

The difference rests upon the faith that, when time permits, the paper can be made to represent an earning-capacity equal to its face.

These bonds and stock-certificates may then be deposited as a basis for a bank-loan of, say, double or thrice the original sum, and this loan may then be used in a business which grants to its customers open-account credits amounting to four or five times the original sum. In each case the interest-rate rises as the risk increases of failure to make expectations good; but the negotiable value of the credit-instrument in each case stands in the proportions stated, nevertheless. And in this sense there can exist no duplications.

The extent to which this process, in one form or another, actually prevails in normal, legal business is beyond the realization of even the average businessman, and far beyond the ken of the lay reader. It is accomplished in many, many different ways, some of which look little alike; yet they all amount to the same end in effect, namely, the expansion, under legal title as the property of the commercialist promoting the "deal," *of credit-instruments which rest their value upon a state of mind, or activity of body and brain, on the part of millions of people.*

The Normal Expansion of Commercial Credits.—It is of the utmost importance, if one is to understand the economic trend of the times, to secure some adequate picture of the manner and the rate in which this modern commercial form of national circulating-medium finds that expansion which is requisite for the increasing population and the growing volume of business per capita. Yet, in seeking this picture, we shall not have recourse merely to the columns of statistics which accompany this chapter in their proper place; for while they may tell amounts most accurately, they give no inkling as to manner.

Indeed, in this particular quest it is best to rely merely upon the news-columns of the conservative daily press for reports of typical daily instances, rather than upon official reports of aggregates; for our aim is not merely to ascertain the hidden facts, but what the people fully know as to those facts—if they would but open their eyes as they read. For this reason we quote below typical press-reports of commercial expansions, chiefly from the columns of the New York *Times,* a sheet avowedly favorable to commercialistic philosophies, and conservative and reliable as to news.

The data thus published are probably as accurate as the official reports from which they purport to come; while the fact that they are put forth by a staunch advocate of commercialism, yet without adverse comment—even from the public to which they are thus advertised—is worth as much as the data themselves. For this proves that they are illustrations of normal or even praiseworthy business-practice, rather than sporadic instances of abuse selected to bolster up our argument. They stand as proof, also, of that public indifference to these acts which is itself a far more tragic menace for the future than are the acts themselves.

Nor are these instances adduced below to be misunderstood as condemned herein because their profits are *big*. Big instances are chosen only because they can be seen. But the real problem of the land lies in the fact that all over its territory *smaller men are doing this same thing upon a smaller scale, but multiplied by millions into a gigantic aggregate.* If commercialism be an evil, then the petty variety of it embodied in the myriads of small tradespeople scattered over the land forms, in aggregate, an evil as great as that of the few large corporations in the big cities.

Thus in January, 1913, an investigation as to the alleged "money-trust" was conducted by the so-called Pujo Committee of Congress. According to reported testimony from Chairman Baker, of the Board of Directors of the First National Bank, of New York, that institution had made in less than fifty years a profit of $86,504,901 upon an original capital of $50,000, or at an interest-rate of over sixteen per cent, *compounded!* During the decade preceding 1913 the bank had participated to the extent of $281,000,000 in syndicate-deals aggregating $2,248,000,000.

According to the same authority, during the sixteen years preceding the inquiry the National City Bank had distributed over $25,000,000 of profits, including at least one dividend of forty per cent, and had enjoyed the accumulation of a surplus and net profit of over $240,000,000.

Again, the United States Currency Bureau report for 1913 revealed aggregate "earnings" by the national banks of the country of $160,980,084 within the year.

According to the public press, the year 1911 showed an accumulation by the Lackawanna road of a surplus of $9,632,000, or 32 per cent upon its capital stock, as compared with a rate of 35.4 per cent for the year before. In 1916-17 this same road earned 38 per cent, distributing 20 per cent in dividends, without a whisper of protest anywhere outside the socialist press, revealing any public opinion that such acts were outrageous.

The earnings for the White Star line of transatlantic steamships are reported as 60 per cent, a rate which was reduced only to 30 per cent in 1912 by the fearful tragedy of the *Titanic.*

Testimony before the Interstate Commerce Commission in November, 1913, was to the effect that a syndicate which included several officials of the St. Louis & Santa Fé company had sold to that system a small road at a profit of $3,891,000 upon an investment of $3,000,000, or nearly 130 per cent of profit in a single turn-over—and that, too, in selling a property virtually to themselves, so that every stockholder not in the syndicate was swindled as thoroughly as was every Consumer using the system.

In 1916 was announced the doubling of the capital stock of the Chase National Bank, with the simultaneous distribution of a cash-dividend of $500 per share.

In 1916 the Vanadium Company, an obscure corporation formed ten years previously with a declared capitalization of only $700,000, and in all probability actually funded far below that figure, was reported as sold for $7,000,000, on a stock-issue of $13,500,000. The profit of one operator in this deal was reported as between $1,500,000 and $2,000,000 during a single night.

In 1917 the properties which originally formed the Standard Oil Company of New Jersey, before its dissolution under the Sherman anti-trust law, were reported as having distributed $629,000,000 since the dissolution—$406,000,000 in cash and $223,000,000 in stock—or over six times the capitalization. In September, 1916, the fluctuations in valuation of stock on 'change were reported as adding eight millions to Mr. Rockefeller's fortune in a single day, making him America's first billionaire.

The earnings of the International Mercantile Marine for the first five months of 1917 were reported as $26,000,000. The New York *Herald* for June 9, 1917, reports that the New York Edison Company had built up a "contingent fund"—corresponding with what the railroads call a "surplus"—of $22,000,000 since 1904, and that it refused to use any part of this money to meet the present increases in cost of operation.

The *Times* for Oct. 1, 1915, reports a "curb-broker" who made $500,000 in less than a year, from $650 as a starter. On Nov. 30, 1915, it reports an increase in the stock of the Saxon Motor Company from $350,000 to $6,000,000. On Feb. 6, 1916, it reports a shipping-company established by Mr. C. W. Morse, the ex-banker, as paying a cash-dividend of 100 per cent to its stockholders *within less than a month from the date of formation!*

On January 26, 1915, the Fidelity Trust Company, of Newark, was reported as declaring a dividend of 375 per cent. On June 4, 1915, the stock of the Ford Motor Company was reported as increased from two to one hundred millions, with a simultaneous declaration of a stock-dividend of forty-eight millions. Easy, isn't it?

Mr. Ford, no doubt, did an extremely valuable thing for his country when he judged rightly as to just what grade of car would suit the largest number of purchasers, and then built it well. Our point is not that he may not have rightfully earned the sum reaching him. *That is for the Consumers to decide.*

The point is that, if he did earn it, *he earned it when he built the cars,* and not when, by simply "declaring" a stock-dividend, he and his directors expanded the country's indebtedness to them in a breath, in a manner lacking all responsibility to those who must pay these moneys thus created by private dictum.

On April 26, 1916, the stock of Tiffany & Company was appraised, upon affidavits by one of the officers of the company, at a premium of 668 per cent above par. From 1891 to 1906 the Fifth Avenue Bank was reported as paying a regular dividend of 100 per cent per annum, with an additional dividend of 100 per cent in 1903, 120 per cent in 1904 and 150 per cent in 1906. Finally a stock-dividend of 400 per cent was declared, increasing the capital from one to five millions. Simultaneously the dividend-rate in cash was reduced to a smaller figure, netting to the stockholders about the same sum as usual.

The Rate of Interest.—This case stands as an illustration of the fact noted later in the chapter upon Interest, namely, that the financier can shift at any time from a high rate upon one valuation to a lower rate upon a higher valuation—which lower rate can afterwards be made to be high again—at will, without coercion by any natural law of interest-rate whatever. The sole limit to interest-rate is what can be abstracted from the people. The sole reason for such a move as just noted is to blind the public by a nominally lower rate, although it involves exactly the same burden upon the Consumer as before.

As incidental evidence that the problem of commercialism is an international one, and that America does not monopolize these instances, it may be noted that on June 12, 1914, the catering firm of J. Lyons & Company, London, declared a dividend which completed 42½ per cent for the preceding year. But this is not much. England or any other country must acknowledge us to be without a peer, when it comes to commercialism.

On Sept. 16, 1914, the *Times* reported the surplus of the Interborough-Metropolitan Company, a corporation holding nearly thirty-four millions of Interborough Rapid Transit stock, as having grown from $788,514 to $1,860,765, within a year. On Feb. 11, 1916, it tells how this latter company had paid, a decade before, $1,500,000 for a tramroad (Pelham Bay & City Island) which afterwards sold for $40,000.

> "Mr. ——— said that $350,000 was paid for the railroad, while the remaining $1,150,000 was paid to Mr. ——— for his services in supplying the 'necessary strength' to finance the building of the old subway."

Social Control.—In order to show how complete and democratic is our control, at present, over this constant expansion of capitalism and its resultant elevation of prices, reference may be made to the history of the legal restraint of the Standard Oil Company. It was in May, 1911, that this corporation, in submission to the Sherman anti-trust law, was dissolved into some thirty-six component companies.

Of course all these thirty-six companies then maintained a competition for the privilege of keeping down the price of oil which can only be called cut-throat! For in May, 1915, gasoline retailed on the road for 12 cents. By six months later it had risen to 18 cents, and by three years later to 28 cents. This was in part due to the war; but on the other hand must be kept in mind that supplies were also increasing rapidly during that period.

On Nov. 30, 1915, the *Times* reported that the stock of these thirty-six companies had increased in valuation by more than $148,000,000 within a fortnight. During the year 1915 the Standard Oil Company of Indiana had earned 53 per cent on its outstanding stock, as compared with 22 per cent in 1914.

On April 18, 1916, the *Times* reported in detail the plan for the doubling of the parent company's stock, the extra hundred per cent to be distributed to the stockholders in the component companies as "a melon"—this being, when consummated, *"the seventeenth distribution of stock among the former subsidiaries of the old Standard of New Jersey since that company was dissolved."*

On Dec. 30, 1916, the same paper stated that the valuation of Mr. Rockefeller's holdings in oil-stock were then "two and one-half times greater" than when the company was dissolved, stock which had been quoted at $1500 a share thirteen months before being then worth $2000. The increase in valuations in Wall street were reported as having added over $8,000,000 to Mr. Rockefeller's property in a single day! Yet this is a gain which, if made by that exceptional producer who might be able to follow Professor Fisher's rule, at the rate of saving $10,000 annually from his wages—at the expense of considerable stinting—*would yet require eight centuries for its accumulation!*

On July 1, 1915, the Delaware, Lackawanna & Western Coal Company announced that it had taken steps to comply with the recent order of the Supreme Court of the United States, that it should separate from the railroad-company of similar name. But simultaneously it declared a dividend of 52½ per cent, in comparison with its average of 23 per cent during the preceding six years, and in its report of a fortnight later revealed earnings amounting to over 90 per cent of its capital stock! In 1916 the railroad-company earned over 38 per cent on its stock, nearly twice its usual dividend of 20 per cent, and an eighth larger than during the previous year.

Public Acceptance of Credit-expansion.—Yet the items listed above make no pretense of being either an exhaustive list of such instances, nor of being based upon a complete history of any of the enterprises cited. They are merely illustrations culled from leading daily papers, as they happened to come to hand, to show not only what is regarded as quite customary within the financial world, but also *what is frankly revealed to the public.*

That is to say, the public *knows* of the expansion of commercial credit in private hands at the rates just stated. How much worse the hidden reality may be can only be guessed from the fact that all ledgers are rigidly sealed against inspection. If the commercialists find reason for complaint in what the public believes about them, it is plainly their own fault.

The *Literary Digest* for June 27, 1914, quotes Sir George Paish, in the London *Statist,* as placing the "marvelous" growth of the United Kingdom in wealth as from about $12,500,000,000 in 1814 to about $85,000,000,000 in 1914:

> "In France wealth has expanded about fivefold; that is, from under ten billions to nearly fifty billions. In Germany progress equally remarkable has taken place."

Sir George gives for the United States a total wealth in 1814 of about $1,750,000,000 and a total wealth now of $150,000,000,000, or nearly ninetyfold increase! Then, after reviewing the marvelous contrast in visible conditions attained during the century, Sir George continues:

> "What are the forces to which we owe this great uplift of the whole race? Many things, both mental and physical, acting and reacting upon each other, have combined to bring about the new conditions; . . . But the greatest uplifting force of the past century has been the growth of a spirit of trust and of confidence between man and man and between nation and nation. This new spirit has infected men on every side of their activities, . . . One of the most noteworthy consequences of the new spirit has been the creation of a credit-system which embraces the whole world, and which has enabled countries to be populated, towns and villages to be constructed, agriculture extended, mines developed, and riches transported from the ends of the earth for consumption and use wherever they are needed."

Yet within a week from the publication of these words broke forth the greatest war of history. The existence of an international credit-system forms no bar to war.[3]

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[3] But the collapse of credit may be worse than war. The winter of 1919-20 reveals central Europe a wreck of unemployment, starvation and misery, largely in districts which suffered no appreciable destruction of tangible property. But what is gone is *credit,* both economic and political.

These illustrations given above of the present method of expanding our volume of circulating credit-instruments, to meet expanding demands, have been drawn from the greatest variety of enterprises, in industry, invention, commerce and pure finance, from those promoted by individuals as well as those for which huge corporations or "trusts" are responsible. In Chapter XII some similar expansions of railroad-capitalism will be found quoted, directly from the sworn testimony of prominent railway-officials.

The Modern Method of Making Money.—The aim in adducing all of these instances of rapid expansion of wealth is not at all to "muck-rake" proofs of individual malefaction on the part of the wealthy, nor to gloat over their horrid injustice. It is merely to gather, haphazard, fair samples of what is occurring daily in financial circles, as characteristic of the normal growth of commercialism, and to show, by instances so big as to be plainly visible, the character of that growth which now permeates every minute cell of our industro-commercial system, from corner-grocery to department-store. In this growth the aggregate of the myriad of small instances, each too obscure to attract attention, probably exceeds that of the few large ones.

Each of these rapidly swelling credit-instruments in the cases listed, like the myriad of untold smaller ones constantly being turned out by the horde of petty commercialists, is measured in *dollars,* and has the same purchasing-power as the same number of dollars earned by productive labor. However impossible it might be to liquidate the whole, or even any major fraction, of these huge bulks of credit-securities at any one time, yet the entire credit-system and business-world depend, daily and hourly, upon the universal faith and fact that *any reasonable portion of these instruments is convertible at any time into dollars; and the dollars thus procured will buy across the shop-counter exactly what the working-man's dollar will buy.* In fractional degree such conversion of these credits into money for daily purchases is actually proceeding at all times.

The Sole Foundation for All Forms of Credit-instrument.—The real basis for all these expanding credits, as became plain from the illustration of the twenty men, and as actually was true of the English tallies for over six centuries, is not any particular amount of gold or silver, nor even any specific tangible property of any sort, necessarily, *but merely the simultaneous* *faith between man and man, amongst many millions, that each, co-operating with the others, and with the aid of the country's accumulation of cleared land and productive appliances, is able to serve or supply the other, that he is desirous of doing so, and that he will recognize the said security or tally or greenback or what-not as a symbol of this readiness and ability to interchange.*

Whatever may be the system or the basis, credit-instruments without instrinsic value may exist to the volume of this faith, *and no more.* The nominal basis—gold—bears to this useful, life-supporting faith merely the relation which the bushel-basket bears to a cargo of wheat. As a measure it is most useful, but otherwise it is valueless. Wheat without any bushel-basket may yet feed mankind; but a bushel-basket without wheat will not feed a rat.

In so far as this mutual faith is rationally backed by the existence of an array of tangible appliances for the creation of life-support, just so far these appliances, and not gold, form the major basis of value for the circulating credit instruments. Yet, as can be fully realized only when economic analysis has been traced to its uttermost, it is not merely the appliances which support public credit. It is *the form of relationship embodied in society, as solidified in constitution, statutes, common law and economic tradition, whereby men are linked with each other and with these appliances in a way helpful or harmful, that a country's credit-system may alone be assured stability or instability.*

For, however more important the appliances may be than gold, nevertheless gold, appliances and labor may all be there together—the gold pure, the appliances efficient and the men anxious to co-operate in production, interchange and consumption—yet all these processes may be impossible. The nation may yet stand paralyzed, impoverished and destitute.

Not only have we seen this phenomenon repeatedly in countries foreign to our own—and thanked God that we were not so stupid as they—but it has repeatedly occurred, in partial degree, in our own land, in times of panic. Then has arisen the astounding spectacle of all this array of powerful and efficient appliances, in a land of natural plenty, standing unimpaired physically, yet quite useless, merely because men cannot agree upon a common symbol of value-in-interchange.

To-day we rely primarily, for this symbol, upon a system of credit-instruments—interest-bearing commercial credits—the entire negotiable, circulatory valuation of which depends upon the prospect of drawing upon them continued future interest or dividend payments. With the variations in this prospect the valuations of these credit-instruments fluctuate up and down, from day to day and hour to hour, so wantonly that a vast machinery of exchanges, tickers, "Wall-street editions," etc., is needed in order to keep the public informed. Occasionally comes a major collapse of valuations, in some "panic"; and then factories shut down, railroads cut their schedules, and the public suffers inconvenience or hardships in manifold ways.

Commercial Credit versus Factory-credit.—But the student of economics, when considering the vital function of credit and credit-instruments in the maintenance of the country's current life, must never forget that, in parallel with this huge system of interest-bearing, constantly fluctuating, commercial credit-instruments, there always operates quietly, stably and efficiently another credit-system, forming a diametric contrast therewith. This is the equally vast aggregate of non-interest-bearing, non-fluctuating, non-negotiable factory-credits, in the form of shop-orders or requisitions, whereby our most costly appliances are continually being made available to our relatively propertyless skilled artisans.

Two things in particular should be noted, in consideration of this most important contrast between our two accepted, parallel systems of credit, before the present economic situation can be at all understood. The first of these is that all credit-instruments, whether of the factory or the commercial variety, are needed solely in order to bridge gaps in ownership between the man-who-has and the man-who-needs-to-use. Some form of credit-instrument is requisite for extending to the man-who-has-not that opportunity to use some appliance which society most vitally needs to have him use. And we shall never understand the present crisis until we understand that the favor embodied in this opportunity is extended to society, and not to the man.

In the factory-system this opportunity to use is merely *assigned* to the wage-earning or salaried worker who is fit to use the appliance. *The only requisite for this assignment is proof of fitness to use.* A huge machine-tool, or a steamship, or a hospital, is assigned to someone skilled in the use of such a thing, and full control granted, without any thought of the issue of any credit-instrument (other than the order) being necessary. Still less is there any thought of necessity for its bearing interest.

But in the commercial world, on the other hand, credit is constantly being extended, not to the man whom society needs to have receive credit, namely, the man-who-has-no-property-but-has-skill. Instead, it is issued in huge quantities to the man-who-has-property-but-no-craftsman's-skill.

Secondly, *commercial credits are not issued primarily for the facilitation* of production. Usually they accomplish this purpose, to some degree, on the side; but it is a secondary function even then. Often this pretense is frankly dropped.

The primary function of the issue of commercial credits—upon which, indeed, their existence depends—*is the extraction of interest from the Consumer. For no commercial credit-instrument which fails to perform this primary function can remain long in the land of the living, no matter how efficiently it may aid production.* The community's need for true credit may be never so dire; it gets none from the commercial system *unless it first pays the tribute exacted for its issue, called interest or dividends.*

Social Effects Independent of Moral Intent.—It is worth while, therefore, to examine the history of this modern accumulation of credit-instruments. In chasing this history relentlessly to its bearing upon social right or wrong we are not interested at all in any question whether, in its gradual erection, there existed any deliberate, malicious intent to exploit the Consumer, or not, although such conscious sentiment may at times have been present. We are interested solely in the aggregate, subconscious growth of the institution, amongst a mass of men the great majority of whom were unquestionably conscientious, upright and humane. They were merely unaware of all the economic results of what they did.

The History of Credit-expansion.—Just how old the process of creating and accumulating credit-instruments for private profit may be, cannot be said. In embryo it has probably prevailed for many generations, if not centuries. But it was not until comparatively recently—early in the nineteenth century—that the accession of the merchant, banker, broker and promoter to social recognition (which was one of the novel and surprising fruits of the new American ethics of liberty and equality for all men), coupled with the beginnings of modern congestion in cities, had given this process an appreciable start into that prerogative and power as a national institution which is our most distinctive hallmark of Americanism to-day.

Diagrammatic illustration of the principal phase of this growth since 1840 will be given later, with a tabular exhibit of banking-figures since 1865. These will show that, whereas the start must have been made not long before 1840 or 1850, and at first was gradual, yet progress since then has been as that of a snow-ball rolling down a mountainside—cumulative and accelerating. Each fresh outburst of commercial activity, following some disturbance such as the Civil War, or the panic of 1873, has accentuated this process of expansion of our volume of interest-bearing credit-instruments. Each expiration of some fund of time-limited paper gave opportunity for another refunding—and these refundings have always been in the direction of expansion rather than of contraction.

But it was not until after the Spanish War of 1898 that occurred that most phenomenal distention of credit of all, amounting almost to an explosion, which astounded even the financiers of that day and inaugurated what may be termed the modern era of credit. Capitalizations began to increase at a rate which was dazing to more old-fashioned minds. The volume of interest-bearing securities began to swell by methods which remind one only of our childish way of "counting one hundred" when we were "it" at "I spy"—"Ten, ten; double ten; forty-five and fifteen!" How the commercialists ever arrived at their enormous increases in capitalism so quickly no one could ever understand; but arrive they did, and their capitalism has stuck ever since.

Professor John R. Wildman, head of the Department of Accounting in New York University, is reported as saying, in November, 1916:

> "The trust movement in the United States began in 1898. During the three years which followed, 149 large combinations with a total capitalization of $3,578,650,000 were formed. Many writers and some fairly prominent authorities predicted failure. It was agreed that no one man or Board of Directors could successfully administer such huge organizations. . . . But new methods of accounting made it

possible for the executives who were placed at the heads of these giant corporations, with their many constituent companies, to have laid before them information as to what was being done. Accounting made it possible to run a huge business as intelligently as a small business had previously been run."

Here Professor Wildman's text is accounting, and this part of his lecture is quoted merely as an answer to those who find mechanical difficulties in the way of a more unified administration of all the industries of a nation, as one factory, so great as to countervail all possible gains. These timid ones need to learn that, when new policies have been planned upon the right principle, *mechanical difficulties have always proven subservient thereto*—as was true in this case of more modest consolidations. The world's progress has been accomplished by those who have dared to believe this general law.

The real reason why some large consolidations have failed to be profitable and permanent, in the past, is that after some sixty per cent or so of an industry has become consolidated it proves so profitable to outsiders to create new enterprises in the same line, just for the purpose of selling them out to "the trust," that no larger percentage of monopoly can ever be accomplished. Thereafter the creation of new businesses to be absorbed proceeds as rapidly as the consolidation—a process not profitable to the consolidation, nor to the country as a whole.

But our chief interest here concerns not the mechanical difficulties of administration, but with the far more basic difficulty of comprehending whence might come these gigantic sums, apparently of real dollars, which figured in the capitalizations of these novel consolidations, or "trusts." In 1901, indeed, this aspect of the marvelous new policy became a public theme. The ablest minds in the commercial world were called upon for explanations. They responded, as we now can see, not with real explanations—because they either did not realize themselves what was going on, or they hated to give the game away—but with excuses and palliations which never approached the real essence of the situation.

Thus, the *North American Review* for May, 1901, published a symposium upon this topic by six leading commercialists which should descend into history as a record of the state of mind regarding the current financial evolution of that day.

The six contributors were Russell Sage, the Wall-street financier; James J. Hill, the railroad-president and "Builder of the Northwest"; Charles M. Schwab, the steel-man; Charles R. Flint, merchant, banker and member of the Conference of American Republics; James Logan, the New England manufacturer, and F. B. Thurber. Mr. Sage's article opens the attack by saying:

> "It is, perhaps, ungracious to sound a harsh note in a company so happy and well content as we are to-day in Wall street. My excuse must be that I honestly believe that we are liable to lose our heads; that we have entered upon business methods that may lead us to the brink of disaster, if, indeed, they do not land us over the brink. On the other hand, these business methods have been inaugurated, and are vouched for, by a company of men who have never known failure, and who may succeed in steering us safely over what appears to my old-fashioned eyes a very treacherous deep.
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> "It is certain that under the direction of these men stocks are booming. Sales are making at a rate unprecedented in the financial history of the world. Everybody is making money. Millionaires are created almost over night. . . . The consolidations of to-day begin at the very outset with capitalizations that cast all past experience into the shade, and that almost stagger the imagination. The steel combination is to start off with a capitalization of one billion dollars. [It actually did start with a tenth more than this.] That is more than one-half the national debt. It is one-seventh of the entire wealth of the United States. The total money in circulation in the United States . . . is $2,113,294,983. This company's issue of securities will represent practically one-half of the entire volume of money in the United States.
>
> "To me there seems to be something very much like sleight-of-hand in the way in which these industries are doubling up in value, as at the touch of a magician's wand. Here we have a factory—a good, conservative, productive investment—turning out anything from toys to locomotives. It falls into the hands of the consolidators, and, whereas it was worth $50,000 yesterday, to-day it is worth $150,000—at least, on paper. Stocks are issued; bonds are put out; loans are solicited with these stocks as security. The man who owned the factory probably could not have borrowed $10,000 on it. Now, however, . . . bankers and financiers are asked to advance $60,000 or $70,000 on what is practically the same

> property. . . . Under these circumstances a 'squeeze' seems to me inevitable. . . . In fact, we have gotten away entirely from the old idea of making the money of the country the basis of our trading. Instead, there is thrown into the business-world, to be used as a trading medium, millions upon millions of new stocks the real value of which is yet to be determined. As soon as this is thoroughly realized we may look for trouble."

Yet not until 1907 did Mr. Sage's predictions of catastrophe bear even partial fruit, and not even yet has the disaster penetrated to the point of quelling this ever-bubbling fountain of fresh interest-bearing securities. Barring temporary ups and downs, *inflation is proceeding to-day faster than ever before.* Throughout the winter of 1914-15 it was checked by the stress originating in the European war, it is true, but by spring it had revived under the stimulus of orders for war-munitions and to-day is proceeding more rapidly than ever.

Some instances of this most recent expansion have already been quoted. Even as early as August, 1915, comes word of the appearance of a new company with a maximum capitalization of ten millions, issuing eight hundred thousand shares of stock *without face-value stated!* With such an act the last vestige of pretense that stock represents actual value invested has been abandoned.

Within a single year the shares of a preceding company, now merged into this new one, sold first at $20 and then, after the merger, at $420! Yet it seems strangely difficult for the ordinary mind to grasp the fact that $400 out of this $420 *has been contributed solely by the public which purchases, not the stock, but any and every article of food, clothing or the like which is on sale.*

And if the final $400 obviously came into the possession of the capitalist in this way, is it such a radical or revolutionary or crazy thing for the public to inquire, very sternly, if the original $20 may not have arisen in the same way?

Nor is the $420 at all likely to be the end of the story. This paper can be given any larger valuation imaginable, merely by permitting the corporation to charge prices which will pay dividends upon that sum. And if the rate of dividends becomes so high that the public becomes restive, it can be reduced at any time, *as a rate,* while keeping it undiminished in *aggregate* *volume*—or even increased—merely by refunding the obligations of the corporation in larger face-value, and distributing the surplus to the stockholders as a "melon." It is so easy that financiers are becoming almost ashamed of it, not because of its outrageous inequity, but because of its childish simplicity.

Valuations of Commercial Principal Dependent Solely upon Income.—If there be any fact which projects from the financial world so prominently that no man might be expected to miss stumbling over it, it is the law—which has already been stated once, but which cannot be repeated and emphasized too often—that *interest-payments and profits determine principal-valuations, and not valuations interest-rates.* Yet day after day, and year after year, in debating these questions, men supposedly intelligent and experienced in finance trot out the ancient superstition that interest *must* be paid at a certain rate, because of the "value" of the principal "invested."

Yet there is not the slightest foundation in fact for that idea. It is pure superstition. The valuation of the investment depends wholly upon what it happens to earn in the future—perhaps less, but usually more, than when invested. That fact is fully considered by every commercial investor before investing.[4]

Thus, regarding Mr. Sage's paper, the *Outlook* for June 1, 1901, says:

> "Mr. Sage's article furnished the text for five replies in defense of the trusts, yet not one of the defenders takes exception to Mr. Sage's figures as typical of the way trusts are capitalized. The uniform reply to his criticism is that *the value of the property is not to be reckoned by its cost, but by its earning-capacity.*" (Italics mine.)

The orthodox authorities in political economy seem to see plainly enough the economic fact. It is strange that they cannot grasp the far-reaching ethical conclusions enforced thereby.

Of the five replies to Mr. Sage only one seems to offer anything pertinent, and this supports our own contentions as to the nature of interest and dividends. Mr. Flint says:

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[4] The important question of the nature of interest, and the laws which determine interest-rates, will be pursued at length in later chapters.

> "As a test of what is really behind the industrial stocks . . . I have gone into the figures of forty-seven among the most prominent companies. These were selected at random. . . . The greatest industrial of all, Standard Oil, which last year paid 48 per cent on the par value of its stock, is purposely not included in the list. Nor need it be included, for without it we arrive at an average that will, I believe, astonish many even among those who have been most active in handling these stocks. . . . He will find that the industrials, almost without exception, are worth a great deal more, *judged by their earning-capacity,* than they are selling for in the open market. Some are earning over 25 per cent a year on their market-values, and the average for the entire forty-seven is 13.6 per cent. . . . A very popular impression exists that industrials are composed principally of water. The best answer to this is that forty-seven companies show an average earning-rate of 7.44 per cent on their total capitalization at par." (Italics mine.)

This, it seems, was the equivalent of 13.6 per cent on their market-valuation. If Mr. Flint and the Ultimate Consumer are to agree, a new definition of stock-water must be developed. There could be no finer proof of water than that furnished by these figures. Nor could there be finer support for our later contention that, averaging all together, *costs of replacement, capitalizations and earnings must always hang closely together, automatically, regardless of the source of the investment.*[5]

Yet from the start inflation worked successfully, and Mr. Sage's gloomy predictions were discredited by experience. The public has become accustomed to the magical growth of riches, and the topic is being neglected—until post-war developments of a similar nature, but surpassing these earlier figures in scale as the Great War surpasses the Cuban War, shall have forced them again to the front.

The younger financiers who astonished the more experienced ones of 1901 were not necromancers, but merely shrewd. According to Mr. Frick, in court-testimony as reported in the

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[5] The proof of this law will be found in the chapters upon Interest.

Literary Digest for Feb. 24, 1900, as to the Carnegie Steel Company:

> "The business from 1892 to 1900 was enormously profitable, growing by leaps and jumps from year to year until, in 1899, the firm actually made on low-priced contracts in net profits, after paying expenses of all kinds, $21,000,000. In November, 1899, Carnegie estimated the net profits for 1900 at $40,000,000, and Frick then estimated them at $42,500,000. Carnegie valued the entire property at over $250,000,000 and avowed his ability in ordinarily prosperous times to sell it on the London market for $500,000,000."

During 1901 the profits actually were at the rate of over one hundred millions per annum. The *Literary Digest* for Dec. 7, 1901, quotes the New York *Journal of Commerce* as saying:

> "Checks were sent on Wednesday to members of the underwriting syndicate of the United States Steel Corporation amounting to one-eighth of their nominal subscriptions, or to $25,000,000 in the aggregate, the syndicate being for the nominal sum of $200,000,000. As only one-eighth of this amount was called, however, . . . the current dividend or distribution by the managers of the syndicate is *practically the return of the entire amount actually paid in.* In addition to this payment it is learned on reliable authority that the profits of the syndicate are largely in excess of the amount actually paid in. . . . these profits were estimated at about 26½%, or say $53,000,000. It is now estimated, however, that these profits may equal or exceed 30%, or $60,000,000. This would be considerably over 200% on the investment." (Italics mine.)

And on June 28, 1902, the same source of information states:

> "The true capitalizations of all the consolidations effected within the last twelve years is reckoned by this authority at about $4,500,000,000, while the increase of large and small independent corporations in the last seventeen months is reckoned at $5,000,000,000."

These figures agree well with independent estimates as to the current rate of output of new securities at that time as at least one hundred millions per month, and as fully three times that rate now.

But what concerns us here is the fact that even fifteen years ago the evidence was not only ample—it was overwhelming—that *there lies not the slightest shadow of connection between capitalizations, or interest-rates, and actual investment in appliances.* For here, in at least this one instance, after the investors had been repaid *their entire original investment in a single payment*—after a delay quite insufficient for productivity to be a factor in the earnings—*and with 200 per cent of profits on top of that, the world of Ultimate Consumers still owed them every dollar of that original indebtedness, and soon more!*

That the expectations of the founders of the Steel Corporation were not visionary may be judged from the fact that its net earnings during three recent years, in round numbers, have run as follows: In 1914 $80,000,000, in 1915 $105-500,000, and in 1916 $114,000,000, with every prospect of a still more prosperous year in 1917. According to Mr. Carnegie's most conservative estimate of the proportion of the valuation of the property to its net earnings the Steel Corporation was worth in 1914 $500,000,000, in 1915 $660,000,000 and in 1916 $715,000,000, and perhaps twice these figures![6]

These are the gigantic sums which the Ultimate Consumers still owe these "investors" in this merger and upon which they must pay interest to these people and their posterity indefinitely in the future. Yet they "invested" only $25,000,000 in the first place—with no probability that they did even that, in value produced by themselves—which sum was repaid to them in full during the first year!

Yet even if the Ultimate Consumers should now offer these people the $715,000,000 in cash for this property, the whole value of which has been created by the purchases of the public, in order to preclude paying further interest thereon indefinitely in the future, the attempt would be futile. These people would probably not accept. They do not wish the debt canceled. It is too profitable.

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[6] The *Times* for. July 31, 1918, reports that the net earnings of the U. S. Steel Corporation for the second quarter of 1918 were $153,273,641, or at the rate of over $600,000,000 per annum. Out of this quarterly sum over $90,000,000 were set aside as war-taxes. According to Mr. Carnegie's figures the Corporation is now worth at least $1,500,000,000 on the basis of its net earnings, accepting the war-tax; or, if it be assumed that the Corporation is capable of the same earnings after the war-taxes shall have been remitted, it will then have become worth about $3,800,000,000. Such is the latent possibility which was not understood by Mr. Russell Sage, but which was partly grasped by the younger men of his day.

Moreover, even if they accepted the offer it would not relieve the Consumer one whit. For this seven hundred millions is now money. It is sacred "property." Its owners possess not only the right to invest it in other industrial enterprises, thereby collecting from the Consumer the same interest-tax through other channels than steel, *but any attempt on the part of the public to restrict this opportunity for investment, or collection of tribute thereon, is immediately denounced by our most ponderous authorities upon the law as a confiscation of property.*

Yet it is obviously property which its owners never created; and upon it, even if they did create it, they have no right to collect interest without the request, or at least the consent, of him who pays it—the Ultimate Consumer.

Confiscation.—Confiscation of property without due process of law steps right through the middle of the Constitution of the United States. Therefore we approach a most interesting crisis, when once the growing issue shall have come to a head as to *whose property it is which has been confiscated.* For every least inflation of the market-valuation of any security *constitutes a confiscation of the property of the Ultimate Consumer,* without the ghost of any process of law, or of any equity upon which to base one.

Yet the Consumer's property is certainly just as sacred as is that of the promoter or capitalist, and perhaps far more so. Do the commercialists really dare to let come to a head the issue as to which form of property is the more sacred?

Our Accumulation of Interest-bearing Securities.—To-day the bank, originally solely a place of deposit for coin or bullion, has become, with its outlying tentacles of brokers and promoters, the natural habitat of our national fund of credit. The primal form of commercial credit-instrument is the bond or stock-certificate. All other forms are subsidiary to these.

The approximate growth of our aggregation of stocks, bonds, etc., will be shown statistically in Table 42. These figures are here exhibited in graphical form, in Curve 2 of Fig. 1. The growth of banking-institutions, measured in various ways, appears in Tables 8 and 9.

The data appearing in Tables 8 and 9 are derived chiefly from the United States Statistical Abstract. There appears to be a lack of agreement as to figures as to the state banks. Barnet, in his "Growth of State Banking," publishes the number of such banks for each year from 1877 to 1899 as stated by the comptroller of the currency, and also as he believes the correct facts to be, in comparison. At the worst point there is a discrepancy between the two of over seventy per cent. As late as 1886 it amounts to forty-three per cent.

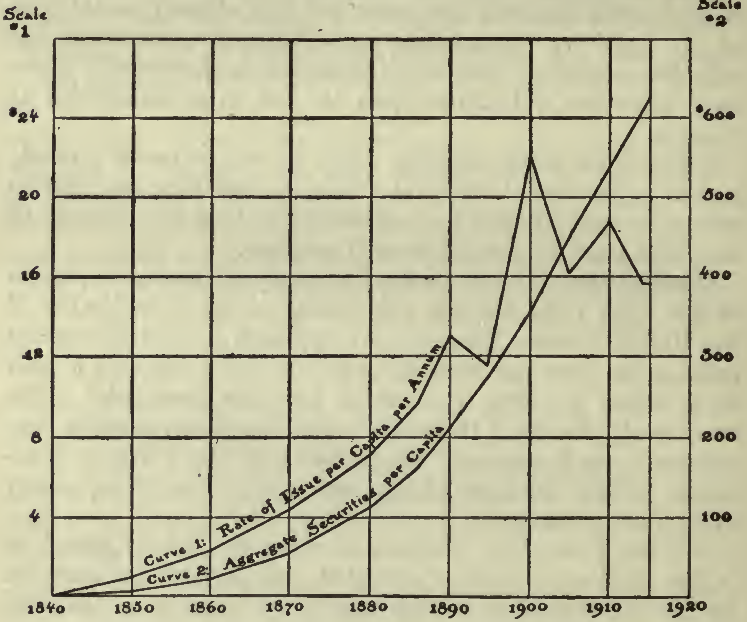

Fig. 1.—Rate of Growth of Interest-bearing Securities per Capita.

The state banks passed through a checkered career in their earlier decades, and even after the establishment of the national banks they were reduced to unity of system only gradually. For these reasons data as to state banks are largely omitted from Table 9.

From the columns of the tables there stand out the following obvious and significant facts:

(1) During the period since the Civil War the credit ex-

TABLE 8

FINANCE AND CREDIT, 1865 TO 1915

Year	Money in Circulation	United States Interest-bearing Debt	Bank Clearings[7]	National Banks				Per Capita Deposits				Total[8]	Ratio of Loans and Discounts to			
				Capital	Dividends	Loans and Discounts	Surplus and Undivided Profits	Nat'l	Savings	State	Loan and Trust Co's		Money in Circulation	Surplus Undivided Profits	Savings Bank Deposits	Total Deposits
1865	20.58	$70.25	(1340)	$9.31	....	$10.36	$1.56	11.38	$6.93	....	....	....	0.50	6.64	1.49	....
1870	17.51	53.04	(1202)	11.08	....	18.64	3.49	14.06	14.25	....	....	....	1.06	5.34	1.31	....
1875	17.16	39.20	(942)	11.30	....	21.92	4.18	15.47	20.82	$3.74	$1.91	$49.20	1.28	5.25	1.05	0.44
1880	19.41	34.37	(1235)	9.09	....	19.82	3.36	16.62	16.34	4.16	1.79	42.58	1.02	5.90	1.19	0.46
1885	23.03	26.65	(743)	9.31	0.72	22.24	3.51	19.56	19.37	6.09	3.33	(54.59)	0.97	6.34	1.15	0.41
1890	22.82	11.53	937	10.20	0.81	30.70	4.65	24.17	24.62	8.78	5.34	69.30	1.34	6.61	1.24	0.44
1895	23.24	10.40	732	9.46	0.66	28.96	4.72	24.94	26.50	10.23	7.85	74.20	1.25	6.13	1.16	0.39
1900	26.93	13.46	1107	8.14	0.63	34.40	5.13	32.20	31.30	16.60	13.47	98.70	1.28	6.71	1.10	0.35
1905	31.08	10.65	1680	9.45	0.87	46.54	7.34	45.16	36.92	28.24	23.65	140.20	1.50	6.35	1.26	0.33
1907	32.22	10.25	1775	10.15	1.14	53.20	8.28	49.65	40.14	35.25	23.68	155.75	1.65	6.43	1.35	0.34
1908	34.72	10.10	1423	10.36	1.10	52.05	8.44	49.34	39.21	33.11	21.06	148.40	1.50	6.17	1.33	0.35
1909	34.93	10.09	1759	10.37	1.03	55.75	8.93	54.21	41.10	27.30	31.39	162.60	1.60	6.32	1.35	0.34
1910	34.33	9.91	1836	10.75	1.15	59.02	9.36	57.47	44.24	29.63	33.40	170.25	1.72	6.31	1.34	0.35
1911	34.20	9.76	1701	10.87	1.22	59.80	9.74	58.40	44.90	29.59	35.15	174.15	1.75	6.14	1.33	0.34
1912	34.34	10.10	1765	10.81	1.26	62.27	9.95	60.94	46.55	30.53	38.44	182.80	1.81	6.26	1.34	0.34
1913	34.56	9.95	1778	10.90	1.23	63.32	10.19	61.36	48.70	31.75	36.81	184.60	1.83	6.21	1.30	0.34
1914	34.35	9.81	1653	10.72	1.22	65.19	10.05	63.50	50.00	32.70	39.92	192.10	1.90	6.48	1.30	0.34
1915	35.44	9.67	1611	10.65	1.12	66.42	10.34	65.92	49.86	32.70	41.90	195.70	1.88	6.43	1.33	0.34
1916	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

[7] Values in parenthesis estimated from New York City clearings alone.
[8] After 1880 including an estimate for a portion of the private banks.

TABLE 9

BANKS AND THEIR RESOURCES, 1896 TO 1916

Year	Number per Million Inhabitants						Resources per Capita						
	National	Savings	State	Private	Loan and Trust	Total	National	Savings	State	Private	Loan and Trust	Building and Loan Associations	Total
1896	52.3	14.1	.....	.....	.....	.....	$46.46	$30.50	......	......	......	$9.27	.....
1897	50.4	13.7	.....	.....	.....	.....	51.75	30.70	......	......	......	9.29	.....
1898	49.1	12.8	.....	.....	.....	.....	54.88	30.70	......	......	......	8.90	.....
1899	48.4	12.7	55.9	10.1	3.5	130.6	62.62	32.80	21.82	$1.17	$14.30	8.46	$141.17
1900	50.9	13.2	.....	.....	.....	.....	66.45	34.50	......	......	......	8.08	.....
1901	54.4	13.0	.....	.....	.....	.....	73.40	35.50	......	......	......	7.81	.....
1902	58.1	13.1	.....	.....	.....	.....	77.20	36.50	......	......	......	7.69	.....
1903	62.4	13.3	.....	.....	.....	.....	78.05	37.80	......	......	......	7.41	.....
1904	65.9	14.0	.....	.....	.....	.....	84.20	38.50	......	......	......	7.51	.....
1905	68.7	14.7	.....	.....	.....	.....	89.21	40.00	......	......	......	7.69	.....
1906	71.8	15.4	103.4	10.8	8.7	220.1	93.87	41.80	42.90	1.68	34.51	8.04	222.80
1907	75.2	16.2	114.1	13.1	9.1	234.7	96.41	43.30	47.16	2.23	35.18	8.54	232.82
1908	77.0	16.3	126.2	11.3	9.5	240.3	98.25	42.81	45.35	1.81	32.41	8.96	229.59
1909	77.2	18.8	125.0	16.5	11.9	249.4	105.98	45.00	36.86	2.72	44.90	9.53	244.99
1910	77.9	19.1	132.1	10.1	11.8	251.0	106.80	48.62	40.11	1.74	45.75	10.28	253.30
1911	77.8	21.3	136.9	11.9	13.3	261.2	110.55	49.60	39.96	1.95	49.74	11.09	262.89
1912	77.4	20.1	140.0	11.4	14.7	263.6	114.70	51.47	40.77	2.06	53.40	11.90	274.30
1913	76.9	20.3	143.8	10.4	15.5	266.9	111.65	53.64	42.53	1.88	52.60	12.82	275.17
1914	76.0	21.2	146.3	10.7	15.8	270.0	115.82	54.93	43.89	1.98	55.32	13.70	286.14
1915	75.4	21.4	144.5	10.3	16.5	268.1	121.50	55.02	43.58	1.76	58.19	......	(295.30)
1916	.....	.....	.....	.....	.....	.....	......	......	......	......	......	......	.....

tended by the United States government per capita has markedly decreased—at least, down to about ten years ago. Since then it has remained virtually constant at about $10 per head.

(2) Bank-clearings per capita apparently decreased until about 1895, at which time they reversed their tendencies. Since then they have more than doubled. It is since about 1895 that the rise in prices and wages has presented such a problem to economists and housewives.

(3) Bank-capital per capita has remained virtually constant ever since 1865 at about $10, varying less than any other quantity listed.

(4) The number of banks per capita shows not the slightest sign of any concentration of banking-facilities into a "money-trust," but rather the marked opposite. While single banks of the larger class have undoubtedly grown enormously in size, yet *the number of banks per person has more than doubled within twenty years.* This is true of all sorts of banks, although they differ in rate of growth, the loan and trust companies leading. In this respect the banks appear merely to have followed the example set by the cities as to population: the big cities growing enormously, but the population still divided about evenly among the several sizes of community, and the smallest hamlets having increased tremendously in number. The same thing is true of manufacturing enterprises. Chapters XV and XVIII give full information as to these topics.

(5) Aggregate deposits per capita have increased enormously. In the national and savings-banks, deposits-per-citizen have multiplied by over sixfold in the last fifty years, and in all banks together by about fourfold in the last forty years.

(6) The resources of the banks have also grown enormously per capita. Those of the national and savings banks alone have more than doubled within twenty years. Including the loan and trust companies, which have grown the most rapidly, and the building-associations, which have been the most sluggish, the increase has been about 120 per cent since the Spanish War, even if the comparison be stopped just short of the tremendous expansion in 1916 due to the Great European War.

(7) But the most phenomenal expansion of all manifests itself in the swelling volume of "surplus and undivided profits." *This aggregate bank-surplus per capita has grown by nearly sevenfold during the last half-century,* being paralleled in growth

only by the deposits. These last are the legal as well as the equitable property of those outside the bank. Both have more than doubled since the opening of the present century.

(8) The most instructive feature of the tables is the four columns of "ratios" in Table 8. Loans and discounts, which form the one item of closest relationship to the problem of the volume of credit, have virtually doubled relatively to the money in circulation during the fifty years, although some even of this basis of reference is itself credit-instrument. On the other hand, their proportions to the "surplus and undivided profits" and to deposits, whether those in national, savings or all banks together, have remained virtually constant.

The doctrine that loans and discounts—which constitute one of the larger items in that credit-circulating-medium upon which depend all production, employment, interchange and consumption, amounting now to twice the money in circulation—rest squarely upon and consist merely of the credit supplied by the people, either in the form of deposits or notes, could not be proven more conclusively than by these columns of ratios, which remain constant over several decades, during the widest range in conditions: war or peace, panic or prosperity, political changes and what not. Yet upon all this volume of credit the banks demand interest—and get it—on the grounds that they have "supplied" the capital![9]

Insurance.—A similar display of the growth of insurance per capita, as a factor in the country's volume of credit which is second only to securities and to "commercial paper" or notes, appears in Table 10. These figures are also drawn largely from the U. S. Statistical Abstract, wherein most of them are credited to Dr. I. M. Rubinow, Insurance Statistician.

The columns in Table 10 under "Insurance in Force" which are labeled "computed" do not pretend actually to measure insurance in force, but merely a capacity for serving as credit-instruments which is assumedly measurable in parallel with the insurance actually in force, relatively to payments, in those lines where data are available as to this item. That is, they

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[6] The "stupendous growth" of banking-credits in the United States was revealed by the report of the Controller of the Currency for January 1, 1920. During the twenty years since September, 1899, the resources of the national banks alone have swollen to 334 per cent of what they were per capita at that comparatively recent period, amounting now to over $224, on the average, for every man, woman and child in the country.

TABLE 10—*Continued on next page*

INSURANCE PER CAPITA, 1850 TO 1916

Year	Number Life Policies in Force per Thousand Inhabitants	Insurance in Force (Dollars per Capita)								Increase in Insurance in Force, per Capita per Annum: Average Since Last Previous Figure	
		Life (Actual)		Miscellaneous (Computed)[10]					Total		
				Stock Companies Only							
		Ordinary and Industrial Stock Co's	Fraternal Orders	Casualty, Surety and Miscel.	Accident and Health	Liability	Mutual Accident and Sick Benefit Assoc'ns	Fire and Marine		Life	Total
1850	1.3	$2.96									
1860	1.9	5.80	....	.....	.....	.....	.....	.....	.....	$0.28	....
1870	21.8	58.71	....	.....	.....	.....	.....	.....	.....	5.29	....
1880	18.4	31.95	....	.....	.....	.....	.....	.....	.....	2.68	....
1890	82.6	64.30	(65.00)	.....	.....	.....	.....	57.50	186.80	3.24	....
1895	128	82.40	(70.00)	$3.89	.....	.....	.....	(67.50)	223.79	....	....
1900	189	112.28	72.70[11]	8.47	.....	.....	$1.08	77.60	272.13	4.80	8.53
1905	268	159.55	97.30	12.44	.....	.....	2.14	84.80	356.23	....	....
1907	285	161.60	92.80	14.69	.....	.....	2.09	84.90	356.08	....	....
1908	291	162.55	95.10	14.83	.....	.....	2.25	90.35	365.08	....	....
1909	311	171.45	98.75	15.40	$4.50	$5.23	2.34	83.12	380.79	....	....
1910	326	178.40	104.00	19.10	5.70	6.47	2.43	86.83	402.93	6.61	13.08
1911	345	191.92	105.00	22.08	6.72	8.47	2.72	94.25	431.16	....	....
1912	363	201.20	99.10	25.05	7.51	9.94	3.22	93.00	439.02	....	....
1913	384	210.70	98.80	30.78	8.17	11.58	3.52	98.75	462.30	....	....
1914	399	217.40	90.80	30.43	7.83	9.27	3.61	104.15	463.49	9.75	15.14
1915	....	....	....	.....	.....	.....	.....	.....	.....	....	....
1916	....	....	....	.....	.....	.....	.....	.....	.....	....	....

[10] Assuming the same ratio of volume in force to payments made as prevailed at the same date in life insurance.
[11] Includes 12 cents "compensation" insurance.

TABLE 10—*Continued*

	Assets					Payments (Annual)							
	Life		Miscellaneous			Life		Miscellaneous					
								Stock Co's Only					
Year	Ordinary and Industrial Stock Co's	Fraternal Orders	Casualty, Surety and Misc. Stock	Mutual Accident and Sick Benefit Assoc.	Total	Ordinary and Industrial Stock Co's	Fraternal Orders	Casualty, Surety and Misc.	Accident and Health	Liability	Mutual Accident and Sick Benefit Assoc.	Fire and Marine	Total
1850													
1860													
1870													
1880	$9.03	....	....	....	....	$1.11							
1890	12.25	....	....	....	....	1.43	(0.75)	...	...	...	...	$1.28	3.46
1895	16.65	....	$0.61	....	....	1.80	(0.80)	0.80	...	...	...	(1.40)	4.08
1900	22.81	0.38	0.86	$0.02	$24.07	2.21	0.82	0.17	...	...	0.02	1.53	4.75
1905	32.30	0.77	1.82	0.04	34.93	3.16	0.87	0.25	...	....	0.04	1.68	6.00
1907	35.08	0.98	2.47	0.05	38.58	3.56	0.94	0.32	...	...	0.05	1.87	6.74
1908	38.11	1.18	2.82	0.05	42.16	3.78	0.95	0.34	...	...	0.05	2.09	7.21
1909	40.32	1.30	2.94	0.06	44.62	3.99	0.99	0.36	$0.10	$0.12	0.05	1.94	7.55
1910	42.13	1.39	3.37	0.06	46.95	4.21	1.00	0.45	0.13	0.15	0.06	2.05	8.05
1911	44.40	1.58	3.83	0.06	49.87	4.42	0.90	0.51	0.15	0.19	0.06	2.17	8.40
1912	46.11	1.71	4.29	0.07	52.18	4.69	1.00	0.58	0.17	0.23	0.07	2.17	8.91
1913	47.82	1.88	5.45	0.07	55.22	4.82	1.04	0.70	0.19	0.26	0.08	2.26	9.41[12]
1914	49.74	1.90	5.49	0.08	57.21	5.14	0.99	0.72	0.18	0.22	0.09	2.46	9.92[13]
1915	....	....	....	....	....	....	....	...	...	...	...	...	....
1916	....	....	....	....	....	....	....	...	...	...	...	...	....

[12] Includes 6 cents "compensation" insurance.

[13] Includes 12 cents "compensation" insurance.

are based really upon payments, but reduced to terms of comparison with actual insurance in force.

Briefly, the showing as to insurance is even more striking than that of banking. However the volume may be measured, it has plainly doubled in volume per capita since the century opened. There is no phase of our marvelously expanding commercialism which is growing more rapidly than that attached to insurance. Large insurance-policies, as a most approved means for making large fortunes hereditary without the payment of an inheritance-tax, are daily becoming more popular as a form of investment.

Commercial versus Natural Insurance.—In arguing that this rapidly swelling aggregate volume of credit-instruments constitutes a dangerous burden upon the stability of our civilization, as will be done later, there must be no misunderstanding of this as an argument against real insurance, as contrasted with commercial insurance. Real insurance, in its essence, is a very simple and useful thing. Its sole function is to distribute harmlessly over many people the burdens due to bereavement, fire, accident, etc., which would otherwise fall upon the individual with an intensity stunting to his own life and unprofitable to society.

Viewed from any factory-system standpoint, this function involves merely the clerical activities of recording the risks, measuring the losses, and distributing the assessments. It involves no appreciable financial questions whatever.

The author knows well that, under existing commercial conditions, insurance by assessment-society has failed to protect. The private assessment-societies failed for two reasons. First, they could not get the business, in competition with the drummer-equipped commercial companies. Secondly, they could not stay solvent. Under commercial standards of money-making everywhere, it was inevitable that risks should be assumed faster than a proper fund was maintained for their liquidation. Money appeared to be coming in rapidly, and was therefore distributed and spent when it should have been conserved, to the ultimate bankruptcy of the enterprise. But this was only because it was not insurance, but *the private profit of the society-members,* which was the accredited aim.

Success may be had for assessment-societies only when (*a*) every citizen is forcibly included and insured, not because he necessarily desires it but because society needs to have him insured; and (*b*) all commercial features, such as stock-holders, dividends and banking, are excluded. Such a form of insurance, chiefly against want in old age, is in successful operation in most civilized lands foreign to the United States. Such a system is just what every businessman would design, if he were once placed in supreme command of all insurance in the country, having no competition to meet anywhere and sworn to keep his administration unsullied by a single dollar's worth of profits or dividends.

For such a national commissioner of insurance would be troubled by no responsibility for finding business, nor for finding capital, nor for paying dividends. He would be responsible only for seeing that no person in the land might die, nor any building burn, nor any ship sink, that the burden due to the event were not distributed over society as evenly as statistics and a sense of patriotic duty can do such a thing.

The worst risks would be his first duty. Quite aside from all the inefficiencies of commercial insurance which are visible in its price (which it possesses in common with all other commercial enterprises) the prime failure of commercial insurance is its *inefficiency in insuring.* For it fails completely to insure the very person or things which society most needs to have insured, namely, *the worst risks.*

For competitive commercial insurance cannot afford to assume any risk which will not pay a dividend. Consequently the first precaution is to exclude all those unusually liable to disaster. Thus commercial considerations restrict our volume of insurance below its proper normal just as (as will be shown later) they restrict our natural volumes of production, trade and esthetic enjoyment.

Yet these worst risks are just the ones which should be brought in first. For society is interested wholly in the insurance, and not all in the dividend. Thus the real basis for life-insurance is that *society cannot afford to have any family of children grow up in poverty and ignorance.* It cannot afford even to be brutalized by the sight of a widow toiling as in a penitentiary, and no better cared for than a convict, when her only crime has been to lose her husband.

Therefore it is the family of the man sure to die soon which society should insure before all others. Yet it is just this sort of family which commercial insurance never insures.

This basic failure of insurance when distorted by commercialism has not been included in any of our later statistical estimates of the current waste of life by commercialism. Yet it is a gigantic and immeasurable loss to the community each year. Even in a cold-blooded, pecuniary way it is a tremendous loss, for three-quarters of our prison and reformatory facilities are required by men under twenty-five; and much of their error is traceable directly to accidental poverty of opportunity during childhood and youth.

In addition comes the far greater, if potential, loss of what these boys and girls might have done during life, if they had had proper education of their faculties. From their deficiencies every person in the land suffers, in general standards of community-life or in direct disaster—if in no other way, in the decreasing purchasing-power of the dollar.

Yet all that is needed in order to remove this social defect is to eliminate the *ownership* from insurance, recognizing it as a function as essential to society as is that of the Supreme Court, place everyone involved upon a salary, include all insurance as a government-monopoly, and then let premiums merely balance losses, plus surplus. In one form or another most countries now maintain a system more or less approaching this plan. But the motto of America is: Free license to commercial anarchy, else our liberties are invaded!

Credit-bases.—Returning to the question of volume of credit, it must be understood that the most accurate statistics as to banks, insurance, etc., can give only a rough measure of the aggregate credit extended thereby. There is no one set of items which is used exclusively or wholly as credit-instruments. Any paper representing any of these phases of banking or insurance may be made the basis for a transfer of credit. Some is merely more convenient than others.

Again, the price which each will bring is also varying constantly. During the period from 1907 to 1914, for instance, the average price of securities in Wall street fell some forty per cent, involving an apparent shrinkage of credit of tens of billions. Yet so great was the issue of new securities during these seven years that the net shrinkage amounted to only about thirteen per cent, or five or six billions of dollars.

The effect of even such an item as this scarcely shows in the tables. Nevertheless the data as to nominal issues and values are the only possible means toward a more accurate estimate of the volume of credit. Taken in conjunction with the recovery of prices of 1914-16 they show a tremendous, if not a steady, expansion in credit per capita since 1907. This is especially true of the longer period since 1898.

The collection of data as to aggregate bases for the issue of credit-instruments must also include some estimate of the volume of commercial paper put forth, in addition to that indicated by Tables 8, 9 and 10. Commercial paper, using the term in its broadest sense to include mortgages, etc., is based upon:

(1) Static wealth in general, such as land, buildings, etc.; it is this class of wealth which is undergoing the most rapid expansion of all, as these pages go to press—not through new construction, but from the exact opposite—the increased demand for buildings due to a temporary cessation of construction, coupled with increasing pressure of population towards congestion in cities;

(2) Floating wealth, consisting of the interchange of commodities in an unfinished condition, indicated by bank-clearings;

(3) Bills of exchange and warehouse-receipts, based upon exchange of commodities with foreign lands, indicated by exports and imports; and

(4) Retail trade, based upon the sale of finished commodities to the Ultimate Consumer.

If any doubt should exist as to the propriety, from the commercialist's side of the argument, of including all these items, the following quotation from an address delivered before the New Jersey Bankers Association on May 3, 1912, by Mr. J. Herbert Case, vice-president of the Franklin Trust Company, upon "The Desirability of Commercial Paper as an Investment," will reassure.

> "We have a wonderful and tremendous country, with a population now of nearly ninety-five millions of people and constantly increasing, possessing the greatest amount of wealth per capita of any people on the globe. They constantly require things to eat and drink and wear, . . . This enormous daily consumption of commodities . . . constitutes then the real justification for the issuance of notes by the merchant

> and manufacturer, the individual firm or corporation, through whose hands these commodities are steadily passing on the way to the ultimate consumer. The annual value of our farm-products alone in 1911 is said to have exceeded nine billion dollars. Think of it, an amount equal to the entire resources of all our 7200 banks! Does not this in itself explain in some measure the legitimate need of temporary capital to plant, to cultivate, to harvest, to transport and to market this enormous annual yield of our farms; and does it not also constitute a fairly sound basis for the issuance of such notes?"

Mr. Case is also authority for the statement that a single bank in New York City purchased within ten years over seventy millions of dollars worth of commercial paper, with loss in only a single instance, and that amounting to less than one three-hundredth of one per cent of the whole. He cites the address of Mr. James J. Cannon before the Finance Forum, stating that, of the $453,000,000 of securities held against the Clearing House Loan Certificates at the time of the 1907 panic, 73 per cent consisted of commercial paper and 27 per cent of stocks, bonds, etc. Yet much of this has escaped our tabular statistics given above.

Farm-credits.—The issue of credit-instruments based directly upon farm-property is itself a huge business, with a huge literature. Other countries than this have proceeded much further by governmental action in this direction than we have. Our own land experienced an agitation for such federal action in the "sub-treasury" scheme of the populists, about the year 1890, but the commercial spirit of the land was too strong for its adoption. We have continued to rely upon the indirect method of farm-mortgages discounted by the banks, a system in which indirectness furnishes better opportunity for commercialism.

Industrial Credits.—As to the use of the ordinary valuation of factories and their products, and of the current business of merchants, jobbers, etc., as a basis for credit issued by banks, that is too familiar to every reader to need argument.

Retail Credits.—Even between the retailer and the Ultimate Consumer there occurs a constant extension of credit roughly proportional to the sales effected. Every merchant must count upon the skillful handling of huge volumes of small credit-accounts, as one of the most important elements in success. Mr. James B. Griffith, writing of "Credit Organization," says:

> "Acknowledged specialists may be employed in every branch of an enterprise, the shrewdest brains may be engaged in buying, producing and selling, but the final conservator of the business is the credit-man; others may be the profit-makers, but he is the *profit-saver*. . . . He is on guard constantly—always on the lookout for the slightest sign of danger, ever ready to take prompt and vigorous action to avert disaster to his house or to lend a helping hand to a customer. His duties make him the most misunderstood man in the entire organization. . . . On no man in the organization is there such tremendous pressure brought to secure favors; on no man do the consequences of his own mistakes come back so surely."

In Table 11 the aggregate volume of such credit currently extended is estimated by assuming that the aggregate wages and salaries of Table 40 are all expended in retail trade, with an average extension of credit of thirty days. It is, of course, true that not all of these incomes are expended entirely; some are saved. But as there exist no statistics as to the vast sums currently expended for retail purchases by persons enjoying incomes other than wages or salaries, and since wages and salaries are usually spent upon much longer terms of credit than thirty days, the above method results in an estimate which is certainly conservative. Not only is the average term of credit upon purchases, even from wages, more than thirty days but, contrary to natural expectation, it develops that purchases made from unearned incomes average much longer demands for credit than those from wages.

It is specifically to be noted that Table 11 does not pretend to give actual volumes of credit issued, but merely barometric index-numbers of the possible bases for the issue of credit-instruments. The actual issue bears some proportion thereto which is probably roughly constant, but never exactly so. The issue of credit has never been a function which shrank modestly from expanding to the utmost limit of its basis.

The figures in parenthesis represent interpolations between census-years, or estimates inexact from other reasons. The figures for "States, etc.," for the earlier decades are only ap-

TABLE 11

Credit-bases and Price-indexes, 1865 to 1915. Per Capita

	1865	1870	1875	1880	1885	1890	1895	1900	1905	1910	1915
Static Credit;											
United States debt	$70	$53	$39	$34	$27	$12	$10	$13	$10	$10	$10
States and minor civil divisions	(40)	(30)	(25)	22	(20)	18	(21)	24	(29)	(35)	(43)
Money	21	18	17	19	23	23	23	27	31	34	35
Farms and cattle	277	271	271	274	293	293	288	297	403	501	(559)
Manufactures:											
Capital	(38)	44	(50)	56	(79)	104	(116)	123	152	200	(260)
Stocks, bonds, etc	40	56	84	112	155	210	271	355	450	537	645
Bank resources	38	59	74	64	82	105	112	149	212	253	295
Insurance in force	(92)	(170)	(141)	(92)	(139)	187	224	272	356	403	(465)
Current Credit, per Annum;											
Exports and imports	18	34	38	48	38	41	35	46	47	45	67
Farm products	(42)	51	47	44	41	39	51	62	79	92	(107)
Product of manufacturers	(74)	88	(97)	107	(128)	148	(155)	160	177	225	(280)
Bank clearings	1340	1202	942	1235	743	937	732	1107	1680	1836	1611
Wages and salaries	(488)	517	(578)	643	(708)	776	(845)	917	(1087)	1268	(1500)
Total	$2578	$2593	$2403	$2750	$2476	$2893	$2883	$3552	$4713	$5439	$5877
Price-Index, average from Table 63 for the United States	142	148	127	114	108	98	90½	97	109½	111	122

proximate. For the later decades these figures rise rapidly, owing to the increasing economic activities of the larger cities, a feature which has arisen chiefly since 1890.

The Evolution of Credit.—The history of credit thus shows it to have been an institution which has developed as thoroughly as have any of our other appliances of modern existence. While our vehicles have been growing from saddles or ox-carts to Pullman trains—while our boats have been evolving from undecked wooden vessels, with oars and a single sail, into the power and intricacy of steel, steam and electricity in the modern liner—our credit-system has likewise been experiencing a parallel evolution in magnitude, complexity and power fully equaling that of its mechanical contemporaries. Our financial tools have developed with, and as a result of, our physical ones. Perhaps in speed, power, intricacy, and faculty for destruction of human life, when incompetently guided, our commercial and financial inventions have even outstripped our mechanical ones.

For the parallel evolution of physical appliances, technical knowledge and financial instruments has been mutually and closely interdependent, rather than merely accidental. It is far more than a chance coincidence, for instance, that the first bank-check in modern history was drawn within two years of the date (1781) when James Watt first made steam-power—which had previously been available only for pumping mines free from water—useful for the rotation of factory-shafting. It is more than mere luck that Lloyd's coffee-house, in London, sheltered the first underwriters of marine insurance as they met at lunch—afterwards to become their headquarters and to supply the business with its name—just at the time when appeared the first ships with rigs sufficiently developed (by the combination of square with fore-and-aft sails in modern fashion, and by the abandonment of the lateen mizzen) to open distant seas to profitable trading, upon a scale mechanically impossible before.

Economic Reform.—Therefore, whatever suggestion for an economic system better than the present one may be offered, a first requisite for its success is that *it must center its mechanical design upon an adequate provision for the fluid circulation and elastic expansion of credit, based upon the general wealth of the country.* This design must be as highly developed financially as is the modern factory-system mechanically.

Yet this far and apparently impossible accomplishment would be attained by the mere replacement of the commercial system by a completion of our long familiar, but only partially developed, factory-system. For this would necessarily involve the substitution of non-interest-bearing factory-requisitions for interest-bearing commercial securities, as circulating-medium. These requisitions would then circulate in a perfectly elastic volume, expanding and contracting automatically in perfect accord with the volume of trade. They would possess ideal stability, from being founded upon the entire wealth of the country. They would be insensible to fluctuations in the supply or price of gold. They would offer no one the slightest temptation to expand them unduly. They would contract without collapse when need for it arose.

For it is the immanent presence of a perfection of mutual credit throughout our vast national factory-system which (in connection with the co-operative spirit resultant from the elimination of all ownership-in-industry) explains that marvelous efficiency and productivity which has flooded the world with a volume of commodities and riches unknown in human history. That is the central fact of past history and of present problems. As the social topic is pursued further and further into detail it will increasingly appear that our conclusions must be guided by an unremitting alertness to the basic importance of credit, in all sorts of economic interaction, as the one solvent catalytic essential for reducing the clashing solidity of unorganized community-life into that fluidity, energy and delicacy, combined, which we now dimly discern to be the attributes of civilization.

Our Opportunity for Voluntary, Ethical Aid to the Economic Situation.—Credit, in this connection, means both the intangible and the tangible. We need a far better tangible instrument than the interest-burdened privately-owned security. That we shall find in the requisition-papers of a nation-wide factory-system.

But we also need, in order to attain to any such an ideal, common-sensible system as that, a far better intangible confidence in one another than now prevails. We need a far better mutual confidence than can possibly be attained by starting off with a worship of, and a cultivation of faith in, *selfishness* as the prime and only reliable motive force within the human race.

There are too many people preaching brotherly love who fail to realize that love and faith are synonymous. Our boasted love of our fellowman, whether religious or patriotic, is barren, unless we have far greater faith in him than to believe that he is sensitive to no higher appeal than that afforded by profits, interest and dividends. We are blind ourselves unless we have greater faith in his ability to see that even his selfish interests are best conserved under a system which makes him richest when he is enriching his neighbors.

We do not really respect the flag unless we have the same high and courageous faith in things not yet embodied in successful statecraft as that faith which sustained those who first wrought the flag, when we and our accomplishments and our problems were undreamed. We are no patriots at all if, every time we bump into a strike, or a slum, or a "trust," or a piece of graft, or any other manifestation of commercialism, we malign our political government as the cause thereof, and decry democracy as inferior to—what? Still less are we consistent, or democratic, or patriotic, if, every time that commercial securities, which are based upon mutual antagonisms and embody organized hatred, threaten to collapse, we fall into a panic and declare that the heavens are about to descend.

At such times, if we fail to realize that all these things were made by and for man, not man for them, we can have no true love of God, nor faith in man, in our hearts. Without those sentiments we can never build a successful, stable system of economic credit-instruments; and, lacking this, we can never have a truly civilized state.

CHAPTER VI

THE BASIC CONTRAST IN ECONOMICS

THE archaic and now obsolete cottage-system of industry, we have seen, comprised two distinct functions, namely: (1) That of *production* proper, including superintendence and useful transportation; and (2) that of *negotiation* incidental to the selling of product, or the procuring of tools and materials. Thus the pristine fisherman, for instance, had first to catch his fish, then peddle them along the village-street, and then bargain for gear, bait, etc.

Thus industry then had to be carried on under a system wherein no commodity might shift from man to man without a simultaneous, parallel shift of a something called "ownership." Nowhere in this archaic system did industry appear divorced from ownership, as everywhere in the modern factory-system.

But the cottage-system, with its ubiquitous ownership-in-industry, was barren, we all agree, of any potentiality for the support of modern populations, in anything approaching modern standards of comfort and luxury. Efficiency and production, in any modern sense, appeared only with the factory-system.

The fertilization of this barren cottage-system of industry by the invention of modern appliances has developed amazingly both of these, its two contrasted functions, along two increasingly contrasted lines of evolution. In this recent social evolution the first, or *productive* function has developed into the modern *factory-system.* The second, or *ownership-in-industry and negotiative,* function has become what we shall here call the modern market-system—or, more generally, *commercialism.*

The Modern Basic Economic Contrast—Production versus Commercialism.—Whereas in the obsolete cottage-system these two functions were merged and confused within a single individual, now they have become differentiated and specialized.

The two basic classes of economic society specializing upon these two functions have become differentiated into increasingly contrasted habitats, manners and customs.

The contrast between these two departments of modern activity is even more basic in character in their internal organization, and their effects upon our social welfare, than they are in outward form. Although we shall find occasion, later, to emphasize the fact that, in drawing the line between these two functions, we are classifying *activities,* rather than individuals —because sometimes the most opposite activities are manifested by a single individual within short periods of time—yet, that once said, it may be noted that these contrasted activities are usually embodied in separate individuals, in quite different walks in life.

It should be stated at the start that all occupations—and also all passive economic functions, such as the holding of interest-bearing securities—must be capable of identification either as productive of life-support for the Ultimate Consumer, and therefore forming a part of our national factory-system, or else they must belong to the commercial or market-system. That is to say, we recognize here only two divisions of all activities or passivities which are social-economic in character, namely, productive and commercial respectively. Our warrant for taking this sweeping position will appear in the next few pages. Its foundations were laid in Chapters II and III.

In some cases it may not be obvious whether an occupation is productive or not; but if it obviously concerns ownership-in-industry or negotiation then it must be classed as commercial. Conversely, if it obviously has nothing to do with ownership-in-industry or negotiation, then we may conclude that it is productive, and a part of the factory-system, even if we may not be able to discern just what it produces. Such, for instance, is the case with education.

Fish or Cut Bait.—It has been stated above that everything now produced for the life-support of the community of Ultimate Consumers is the result of the activities of the factory-system department of social energy. If so, then all those other activities devoted to negotiation and other commercial destinations must be regarded as non-productive.

This is a sweeping statement. Yet its truth is incontrovertible, because founded upon an equally sweeping fact of modern industry. This is that *not a single capitalist-employer of labor ever permits any form or feature of commercialism to find lodgment, even for a moment, upon the premises which he controls.* To this statement there is no exception to be found, across all the continents and nations yet modernized by commercialism.

That is to say, we are dealing here not with some majority-opinion, or preferred policy, on the part of men of affairs, but with a unanimous, rigid, basic tenet of the businessman's faith. He everywhere excludes rigorously all ownership-in-industry and all negotiative effort from the precincts of his authority.

He does this because he knows that the instant such institutions were permitted to enter at the door, the efficiency of his factory would fly out of all the windows at once. He does this because he knows subconsciously, although he may not have given the matter conscious thought, that *the modernized nations of the globe have prospered in material wealth and power beyond any precedent of history, just as rapidly and in so far as they have adopted this rigorous exclusion of all commercialism from within their productive organizations.*

This universal tenet of all capitalist-employers and men of affairs we shall accept at its face-value, as the one basic foundation for all material welfare and prosperity, as the one basic guide for understanding political economy. The only thing radical about these following pages is that we propose to follow this tenet to its logical conclusions, just as rigorously as the commercialists lay it down in their *de facto* premises.

A Deadly Parallel.—For, if there be any doubt as to the basic character of this distinction between the obsolete cottage-system and the factory-system, or between modernized commercialism and the factory-system, on the score of relative efficiency, it must be dispelled immediately upon any serious proposal for the abandonment of the factory-system, even while retaining modern factory-appliances and superintendence, for a return to the cottage-system made up of ownership-everywhere-in-industry. Let us imagine, for instance, that in a modern factory comprising several different departments, between which interchange of materials and service is occurring constantly, the now obsolete cottage-system is again installed, requiring individual ownership in things as a prerequisite to their use.

All the other attributes of a modern factory—unity of superintendence (so far as it can survive the change), supplies of power, the latest tools, modern raw materials, etc.—to which exclusively the marvelous efficiency of the modern factory-system is now usually attributed by the authorities upon political economy—are to remain as now. The only change is that *property in industry,* as an institution, is to be re-inaugurated within the modern factory, as it prevailed a century or more ago everywhere in industry.

This imaginary situation would be exactly what would have resulted if the last century had been devoted solely to the invention of appliances, without creation of the factory-system.

In the first place (we are supposing) each workman must now actually own every tool before he can use it. This of itself immediately throws out of use the greatest majority of all modern appliances and the majority of all workmen. The average modern tool is far too costly for the average modern workman to acquire it. But a minority of the workmen would still be able, under our imaginary system, to acquire some one or other of the less costly appliances, to use them as best they might alone. With time, we shall see, groups of workmen would inevitably be formed for the purpose of owning the more costly tools.

Next, each workman must actually buy his supply of raw material before he can begin work upon it. Even where these materials are fairly raw in fact, as with lumber, bar-iron, etc., he can of course buy only at a disadvantage. But we will not hamper him at present, in our supposition, with any demoralization of his external sources of supply, such as must inevitably occur with the extension of our supposition to other factories than his own. His market for supplies may be assumed to be what it is now.

But in this market he appears as an individual buyer. Any businessman or purchasing-agent knows what that means. He buys at a tremendous handicap, as to both price and quality. He uses only small quantities; hence he cannot command favors. He gets merely the leavings, the haphazard remnants, of no standard quality; or, if he insists upon cutting into a standard lot, he pays double price for the privilege. One of the prime sources of efficiency of the modern factory, its ability to purchase and handle materials in large quantities, has been lost at the outset.

But in modern factories each workman usually gets his "materials" in a far from raw state. Not only are they worked up for him by outside factories, as lumber and bar-iron are, or still more as we have seen the materials of the shoemaker to be, but they have already been worked upon by other workmen within his own factory.

Again, when he finishes his task his produce is still a long way from the Ultimate Consumer. It goes, instead, to a long line of workmen each of whom must develop it a step farther before it can be of use.

As emphasized in a preceding chapter, this constant, active flow of partly finished materials from workman to workman constitutes the very life-blood-circulation of the modern factory. Yet scarcely any conceivable phenomenon could so completely derange, block, demoralize and paralyze this factory-circulation of goods and service as would the permeation throughout the factory of the commercial institution of *ownership-in-industry.* A modern factory-equipment clogged with the property and ownership ideas of the cottage-system would be just about as useful and efficient, and would be just about the same sort of an anachronism, as would be the steamships "Olympic" or "Leviathan" when manned by a crew of coracle-paddling prehistoric Britons!

For, in such an imaginary factory, whenever a workman fell sick, etc., his part of the work must stop until he gets well, or until some other waiting and idle workman might be found to buy out his collection of tools. But meantime the product of workmen preceding him must pile up in the shop, which these preceding workmen cannot afford to have it do; for they receive "wages," turn over their capital and buy fresh raw material only as this sick workman ordinarily buys up their product.

Similarly, the workmen following the sick one must soon cease work, for with his illness their supply of raw material ceases. Nor may any other workman replace the sick one temporarily, because the requisite tools are "his" and could not be subjected to the control and use of another without incurring the most intricate questions as to title, share of the reward, responsibility for wear, damage, accident, etc.

Plainly a first requisite, although a costly and wasteful one, for keeping matters moving at all, under the ownership-in-industry system, is to have at every point a *duplication or* *multiplication* of men and facilities, beyond the natural need, so that should one fall idle the others may carry on—with the result that whenever all are well some must be idle anyhow. This is in direct contrast with the factory-system, where *monopoly prevails everywhere.* Only one appliance is provided for each job, and that is entrusted to one man or another, upon full credit, as need may arise. No unnecessary duplication in parallel is ever permitted.

To the modern superintendent of industry the prime requisite for efficiency is to have each tool, or job, or lot of raw material equally available for any man, and each man ready to undertake any job or use any tool at need—all question as to who or what being determined solely with a view to getting out the work. But under any "system" of ownership-in-industry, man and machine are linked together as rigidly and helplessly as were the peasant and the land under the ancient feudal system. And these two systems are about equally paralyzing to progress in civilization.

For instance, American engineers erecting bridges or the like in oriental countries found their worst obstacle neither in the geographical remoteness of locality nor in the inherent ignorance of the natives, who proved ready learners and good workmen. They found it, instead, in the prevalence of *caste,* which shackled certain men to certain jobs.

Thus a native hired as a riveter, who happened to drop his rivet, might not stoop to pick it up. To do so would be to lose caste. Unless an otherwise unneeded helper of low caste were kept constantly on hand, the job must be interrupted and the rivet cool until a low-caste man might be found to pick up the rivet.

Such a situation, the direct opposite of American cheery readiness to undertake any task needed, without regard to convention, is intolerable to the spirit of American men of affairs. Yet its inefficiency in actual India is as nothing compared with what would prevail in our imaginary factory, if once permeated with the antiquated cottage-system ideas of ownership-in-industry.

But our picture of this inefficiency is barely begun. For each workman, before he can receive "wages" for his productive effort, must find a market for his goods. He must divide his time between factory-work proper and peddling his produce, just as the pristine fisherman had first to catch his fish and then hawk them along the village-street. And while he is peddling his goods the appliances "belonging" to this modern workman (under our imaginary ownership-in-industry system) must remain idle, just as the fisherman's boat must lie idle upon the beach until he succeeds in selling his catch.

For these appliances are supposedly "his," and when any question of title, or of responsibility for what belongs to another, is raised between one owner and another, it takes an army of expensive lawyers to keep matters even half straight. The rights of property are sacred!

To any reader enough of a businessman to have had experience in selling, this peddling part of our imaginary workman's duties will plainly be done with an inefficiency appalling to modern minds—an inefficiency far exceding that of his productive work. The limited number of people whom he can reach, their limited and varying demands, the fluctuations of demand with season, the many reasons for spreading produce over wide areas, etc., are all vast reasons against his ever being able to accomplish alone a hundredth part of what is accomplished by a modern selling-force. These reasons can receive no more than mention here. Commercial readers can easily fill out the blank from their own experience. Non-commercial ones must try to imagine.

But the bulk of all output by individual workmen is not in a form for use by an Ultimate Consumer. It is merely a thing advanced one step toward that remote end. Therefore the majority of all workmen in our imaginary factory must find a market for their goods among their fellow-workmen, who will buy not to consume, but to manufacture further. In the actual world this forms the greater portion of what is wrongly called consumption—the purchase of goods for further manufacture, or for resale, and not for consumption at all.

In short, no workman under this imaginary system of ownership within the factory could ever secure either a supply of material on which to work, or a destination for his produce, without himself seeking some other workman happening to occupy the particular stage in manufacture which fitted in before or after his own, then selecting which one among several such might best serve his own ends, and finally haggling with him, or with first one and then another, over price and quality

—praising his own goods, decrying his opponent's, cajoling his man, making offers or "propositions," rejecting others, bluffing, retiring from the market while he still desired to buy or sell, returning after waste of time to seek a better offer, or to accept that which he had hoped might be bettered but which was not. All unity of superintendence and efficient co-ordination must disappear, with the authority of the Central Office, as soon as each workman becomes an independent owner of industrial appliances or materials.

But these evils already recounted form only the beginning of the trouble. Because of these very obstacles to progress human nature will attempt to overcome them by organizing against them, to what degree is possible. But this sort of organization only makes matters worse. Organizing an error makes the evil worse, just as organizing truth multiplies good.

The Modern Economic Despot: Ownership Synonymous with Opportunity.—For two things will quickly become clear to the workmen of our imaginary factory permeated with ownership-in-industry, namely:

(1) That *ownership* of tools or materials, having now been artificially elevated not merely into a peerage with productive use, but beyond, into an overlordship, because needlessly made a prerequisite to use, *has speedily become master and despot over that latter sort of effort;* and

(2) That *interchange* of materials, being naturally the soul of factory-production and a pre-essential to all productive effort, but now become possible only after negotiation as to price and quality at each step, *the negotiation of opportunity for interchange must similarly rise in relative importance, to become a line of effort held superior to production itself.*

Economic Caste.—Consequently two new and highly specialized vocations will add themselves promptly to the usual list of factory-duties, or crafts; and these, instead of taking their place beside the others upon a footing of equality, will assume a controlling dominance over all others, commanding everywhere a superior reward. These vocations will be:

(1) *Ownership,* as a profession and a source of income, and
(2) *Salesmanship,* as a high art.

Each of these vocations will soon prove to be far more lucrative than any of the branches of production proper. Therefore an inevitable migration of labor from productive crafts into these new vocations will have been set up thereby. Parity of craft and opportunity, now the keynote of the actual factory-system, will be gone from our imaginary one. The economic fields of human activity will have developed a disparity of place in life such as we have always jealously excluded from our political organization. "Liberty and equality," of which we are now so proud in our political traditions, will have become foreign to our economic standards.[1]

Further, since production will now be unable to proceed except in the train of these overlordly vocations, it will be permitted by them to develop only to that degree which results in, not the maximum output from the factory which had been physically practicable before this innovation arrived, but only that output which results in *a maximum income reaching the non-productive ownership of the appliances of production; or, secondly, in a maximum income from the negotiation of opportunity for interchange of materials.* Hence the law of supply and demand, as a natural balance of wholesome psychic impulses, will have been needlessly dethroned from its normal sovereignty over industry, and productive effort made subservient to an abstract, indirect, unnatural and soulless institutional determination.

Charging All the Traffic Will Bear.—Thus, once admit into the most modern factory the ancient cottage-system principle of ownership-in-industry, as an institution upheld by law, public opinion and tradition, and *all interchange and production proceeding within that factory will thereby have been restricted, automatically and uncontrollably, to that point where the return to the owner or negotiator attached to each productive process, rather than to the producer or the Ultimate Consumer, is a maximum.*[2]

Thus, in our imaginary factory, one man with a keen eye to personal advantage will secure control, through ownership, of the boiler-room. He knows that all need steam. Hence he concentrates his brains and brawn and nerve upon acquiring possession of the source of supply. This is what is called commercial "initiative."

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[1] See the later chapter upon Unemployment for a development of this idea.

[2] See the later chapter upon Economic Equilibrium for a development of this idea.

He does not do this from any natural affection for steam-making, nor from a weak indulgence in its excessive consumption. He does not consume a particle of it. He does not create any instrument for its production. He merely secures control.

He does not do this evil, destructive thing because of any immoral or psychic impulse whatever, but merely because society has supposedly provided no properly organized way for supplying this factory with steam, by arranging a non-owning co-operation between steam-makers and steam-users, as in the actual factory-system. Indeed, in view of this imaginary lack in the social consciousness of his community, this owner of the boiler-house has done the best possible under the circumstances; but he has incidentally stabbed the modern, efficient and lavishly productive factory-system to the very heart.

As for the production of the steam itself, this enterprising boiler-house owner probably knows little, and cares less, about the art. He finds plenty of half-hearted, peace-and-work-loving wretches ready to shovel coal under his boilers for small pay. The talent, or "initiative," of this man is not for production at all, in any of its branches, but for *commercial combat.* His aim is control, not use; and ultimately tribute, not equitable exchange. For if it were any of these latter he would promptly abandon his policy of ownership-in-industry, which obviously only interferes with both production and exchange, and enroll his services in the normal, familiar factory-system, *which provides for a steam-supply without any separate ownership of the boiler-house, and in which income always takes the form of wages or salary.*

The common idea that ownership of the boiler-house by *someone*—usually the owner of the entire factory—is a necessary pre-requisite to a steam-supply will not stand scrutiny; but that more penetrating scrutiny must be deferred until we can reach a broader stage of the analysis. For the present it is enough to note that, so far as all the processes occurring *within* the factory are concerned, human nature finds itself far better able to make and use steam efficiently without separate ownership-in-industry than with it. If we but extend that same idea to cover the making and use of boilers, as well as the steam made from them, we shall see that the ownership of the boiler-house, *by anybody,* is a function naturally extraneous and irrelevant to production.

But, in our imaginary modern factory permeated with ownership-in-industry, this boiler-owner is after a maximum income to himself, and not the maximum output of produce, concerning which latter he cares nothing. So his office is first to drive away from the boiler-room door all who would dispute his control (and these will inevitably be many) and then to say to every man in the factory: "Not an ounce of steam do you get unless each of you pays me tribute."

Profit Is Tribute.—Nor can this tribute claim to be merely the natural cost of the steam. *For this natural cost is that which the normal, actual factory now pays for its steam, and his tribute begins only after all this natural cost of the steam has been met and exceeded.* It is only as the price runs above the natural cost that the function of ownership can derive any income at all.

Similarly the engine-room would be found to be in charge not of the best engine-runner, but of the best commercial fighter. He also announces calmly: "Not a wheel in the factory may turn unless I get tribute from all!"

Here again it is not costs which are demanded. The natural cost of power, in the form of wages, depreciation, fuel, etc., is now charged up against every workman in our actual, existing factory-system; and what we are debating now is something foreign to every factory in the land, something religiously debarred by every employer of labor in America—profits over and above natural, factory-system costs.

So all, in our imaginary factory, will pay up this pure tribute, in addition to the natural cost of power, because *to refuse is paralysis and starvation.* Meanwhile the engine gets itself run somehow by strictly second-class talent, because all first-class talent is busy collecting tribute through ownership or negotiation.

Equivalents.—Nor is it relevant to reply that, even under the ownership-in-industry system, no man might secure such control of boiler or engine until he had first produced for society the fair equivalent in value of boiler or engine, with which equivalent he had honestly purchased the appliance in question—whereby he has acquired a "right" to do as described. The actual modern employer of labor tells his men (in effect) that they may save up and buy all the boilers and engines they wish, but that *under no condition may they bring them into the factory for the efficiency of which he is responsible,* there to be set up in unity of use under heterogeneity of ownership.

Ownership-in-industry.—For ownership and ownership-in-industry are two very different and directly contrasted things. If our imaginary workman who had saved up and bought the boiler-room had contributed directly to society all which he ever produced in his life, he could never make good to it the loss which he imposed upon it when, as an individual independent of the organization of the factory, he intruded into the factory-system his private ownership of boilers *which other men must use in their daily work.*

But the public opinion of this imaginary factory-community, permeated with eighteenth-century ideas as to the necessity of ownership-in-industry, would not only tell all owners of boilers and engines that they had full right to intrude them into the productive system, by installing them in bodily association with the machines owned and used by others, but it would tell all workmen that *there was no other way of securing the privilege of steam-power than this*—of bargaining with these owning fellows as to the tribute over and above natural cost to be exacted for it.

But actual modern society, of course, having everywhere before its face the familiar factory-system, and knowing therefrom that the fullest use of steam-boilers is not only compatible with, *but depends upon,* their non-ownership by the man who makes the steam, or by any other agency dissevered from the factory-organization, knows that the separate ownership of the boilers was an egregious error in management—such as could not conceivably occur amidst our modern ideas as to refinement of factory-efficiency—and that the statement that there was no other way to procure steam is a huge misconception, a community-delusion.

But our imaginary public opinion, supposedly existent before there were any true factory-system standing ready to teach it, must be excused for its inability to grasp these facts.

The Equities of Ownership-in-industry.—Therefore the debate between the archaic cottage-system of universal ownership-in-industry, on the one hand, and the modern factory-system purged of all ownership-in-industry on the other, pivots—when one turns to questions of equity, social efficiency and rule of conduct—upon two basic questions. It is true that both of these questions are swallowed whole by every man-in-the-street, or professional teacher of sociology, who now upholds the present form of society as basically right, although possibly wrong in detail. Nevertheless, in any sincere analysis of the evolution of American economics these two questions must ever be kept to the fore, as shedding first light upon our past path and our future goal. These questions are:

(1) Is it wise or right to permit any man to invest his savings in ownership-in-industry, as contrasted with mere ownership of that which he intends to consume?

(2) Is modern ownership-in-industry normally purchased with savings from productive industry, or from *re-invested tribute from previous ownership-in-industry?*

Full answer to these questions must be deferred until later in the book. But since it is a rule in mathematics that the accurate statement of a problem amounts to three-quarters of its solution, it must be recognized here at the start that the obvious absurdity of the modern factory imaginably permeated with ownership-in-industry throws straight into one's face these two basic, sweeping questions.

The real absurdity of this incongruous imagining, of a modern factory poisoned by infiltration of ownership-in-industry, cannot be fully depicted here. The situation is quite a parallel to, and not one whit more absurd than, the imaginable tradition in domestic economy which might declare that the only way to determine the preferred cook was to open the kitchen to all applicants for the place, provide all of them with fuel, raw materials and dishes for a simultaneous, continuous experiment in cooking, and then select daily the best cooked dinner for consumption, *but paying the cost of all.* Or the equal absurdity of asking each applicant for the job to bring her own cook-stove, dishes and materials, knowing that you would have to pay her the full cost thereof, plus a profit, whether you ate her dinner or one of the others.

Evils Multiplied.—So (to continue the simile of the factory imbued with ownership-in-industry), the foundry, the machine-shop—or perhaps each one of its expensive tools owned separately—the tool-room, the pattern-shop, the paint-shop, etc., would each be found to be "owned" by some person who made, or needed to make, no other effort at life-support than that involved in maintenance of control. In each case skill in relation to the thing owned, or to the work performed with its aid, has nothing to do with the identity of the owner. It is *combative commercial ability* which alone determines who shall enjoy authority and tribute.

The methods by which these negotiators might maintain their personal control over production would be various. Some would win by a steely eye which no man could outstare; some by a skillful mention of half-truths; some by a magnetic personality, hypnotizing the victim into a belief that anything which so magnificent a specimen of humanity as this might espouse, must surely be all right; some by overbearing perseverance, inducing submission as preferable to annoyance; some by a keen perspicacity as to personalities, or as to weak spots in his adversary's armor; some by mere endless, persistent circulation of themselves among those who may happen to need interchange at the moment when they appear.

To either the student who is trying to understand these things or the Ultimate Consumer who has to pay all the bills for this wasteful confusion, it makes not the slightest difference whom fate may select for these despotic offices, nor what psychological peculiarities may determine the choice. The supreme fact is that, once having admitted ownership-in-industry as an institution, then the despotism and the waste and the blocking of production become inevitable. Let us forget personalities and observe *institutions* and their fruits.

Multiplicity of Agencies.—Then the worst of this poisoning of the modern factory by this imaginary ownership-in-industry lies not in the mere fact that each separate tool and department must inevitably be separately owned, so that interchange can be effected only through costly and wearisome negotiation. It is that, owing to the relative profitableness of effecting this interchange, as compared with either production proper or even passive ownership, men would flock into purely negotiative callings, without necessarily owning anything except the things they bought or sold, and would devote themselves to quarreling over the privilege of effecting interchanges between craftsmen of different trades.

Thus no machinist might need a reamer from the tool-room, nor a molder a pattern from the pattern-shop, that he did not find himself confronted by a horde of competing agents, each pretending to help him secure his reamer or pattern. Not only would he find himself forced to select some one among a dozen separate, competing tool-rooms or pattern-shops, but *he would find each of these represented by a dozen different agencies for interchange, or brokers*—some of them authorized and some not.

Each would assure them that his agency was the best and the cheapest. Yet the only result of all their combative efforts would not be to aid the poor machinist to secure more or better tools than now, but actually to force him to rest content with less, with an impoverished supply of tools, as compared with what is made available to him in every actual factory; and further, *he must pay the aggregate cost of all these unwanted intermediaries, in addition to the natural cost of the tool itself, before he may enjoy even that.*

The Ethics of Commercialism.—The reader will note carefully that to none of these agents of ownership-in-industry has been attributed dishonesty or malice. These evils, while doubtless more or less present—invited, indeed, by the very nature of negotiative vocations—are not the topic of these pages. Our duty is merely to draw a fair comparison, from the point of view of the Ultimate Consumer, between two at present equally lawful and respected methods for effecting or influencing interchange between different trades or individuals, as an incident to supplying him with the necessaries of life. These two methods are:

(1) That of the actual modern factory, from which ownership-in-industry has always been universally and rigorously excluded; and

(2) That of ownership-in-industry itself—an institution originally instanced in its pure form in the cottage-system, but now developed by modern invention into the intricacies of the vast commercial system of the day.

We are inquiring here as to the inherent economic natures of these two methods of organizing effort, as systems or institutions, with a view to learning which is productively the more efficient, and not at all as to the moral character of individual found in either. At present we are not even inquiring as to what sort of individual naturally gravitates into either system, nor what may be the reaction of the system upon his moral nature after he has landed there. *We are studying activities and institutions, not men.*

Human Gravitation under Commercialism.—Within our imaginary factory permeated with ownership-in-industry it is certain that, because of the abject dependence of productive effort upon that privilege of interchange which has now become dominated by negotiative skill, the best of all the brains, nerve, skill, energy and proceeds available would soon be going, not to the productive part of the dual system, but to the professional owners and bargainers. For bargaining is an exceedingly profitable calling. In a given amount of time and effort a sum may be *acquired,* by skillful or energetic or ruthless bargaining, which is stupendous in comparison with what can be *produced,* by the same time, effort, skill and energy, when directed against the natural obstacles to the development of life-support.

The cogency of this fact in assorting the several sorts of ability within our imaginary factory is obvious. Not only those who were adapted by nature to bargain successfully would turn to that calling, but *many less skillful must inevitably swallow the tempting bait,* and be lured from the ranks of production into those of commercial combat over the privilege of exacting tribute, there to swell the statistics of commercial failures by their casualties in battle due to inaptitude.

But these failures are not really due, as they are commonly attributed, to inherent human incompetence. They are due to the fact that the unnatural prizes of commercialism must be continually deluding a steady current of the commercially inapt into commercial callings, there to suffer or die before learning their error, whereas in production they might have succeeded, even if only modestly.

The Sole Source of Life-support.—There would thus be at work within this imaginary factory two distinctly contrasted lines of effort. One of these lines, comprising all those sorts of activity which were prevalent in the original factory, before its permeation with ownership-in-industry—that is to say, those alone found now within any actual factory—*would be solely responsible for whatever production might take place.* For it is our actual modern agglomeration of factories which now produces all which we consume. There is not the faintest glimmer of evidence that the introduction into any modern factory of any of these activities inevitably connected with ownership-in-industry would enlarge in any way its productivities.

For, if this were so, then our actual factory-owners would long ago have made at least some progress toward the incorporation within their factory-system of this desirable factor. But not only has no progress been made in this direction; their whole effort is actually exerted in the opposite direction, *to effect consolidations,* and so abolish competing ownerships-in-industry.

Indeed, if any inference is to be forced upon us by the efficiencies resultant from the various sorts of industrial effort, this consolidation of industry, with its reduction of antagonisms and bettered co-operation, is the sole thing useful which the commercialists do. It is therefore pertinent to note that, while and in so far as they do it, they thereby cease to be commercialists, for the time, and become productive.

No; the productivity of our existing factory-system plainly is maintained in spite of, rather than by aid of, all activities in ownership-in-industry. All which it may produce must be the result of those activities which are now characteristic of every actual factory in the land; and these activities are now everywhere guarded—carefully, jealously, religiously guarded by our capitalist-employers—from any taint whatever of ownership-in-industry.

The Parasite upon Production.—Contrasted with these factory-like productive activities, in our imaginary factory permeated with ownership-in-industry, there would be a whole array of vocations *devoted purely to questions of ownership-in-industry*—not ownership for the enjoyment of ultimate consumption, which is the sole natural and beneficial ownership, but ownership-in-industry maintained for the sole purpose of collecting tribute, which is a far different thing. This array of vocations would inevitably comprise the most brilliant minds and the ablest characters in the factory. Its pecuniary rewards would be high. Its prestige consequently would be enormous.

Either through fear or cupidity it would everywhere command obedience and assume authority. It could, and inevitably would, arrogate to itself the position of being regarded as the highest stratum of life within the factory.

Yet from our better informed point of view, knowing orderly, co-operative, efficient, non-owning factory-production as we know it, this whole array of antagonisms and duplications of effort over ownership-in-industry must be regarded as sheer waste —a gigantic, dead-beat bluff—parasitical upon, rather than contributory to, the real productivity of the factory, and deserving not one iota of all that magnificence which was partly contributed to it voluntarily, in ignorance, and partly arrogated to itself by sheer tyranny. *It would not only produce nothing itself, but its presence would so seriously interfere with the activities of those anxious to produce as to drop the output of the factory to some very small fraction—certainly not over one-tenth, and possibly one-twentieth or one-fiftieth—of normal.*

The Employer's Gospel.—There is no class of public opinion in America to-day which should be so positive and unanimous in corroborating the author, as to this, as the businessmen, capitalists and employers of labor. *For there is not a factory-owner nor businessman in the land who, upon reaching his factory, store or office some morning and finding that overnight this reversion to the cottage-system plan of ownership-in-industry had permeated his premises, would not immediately denounce the whole chaotic mess of confusion, cross-purposes, undesired multiplications, delay, antagonism of needlessly egotized interests, injustice to productive skill, and ruination of aggregate efficiency, as sheer barbarism.*

He would promptly call in the police and clear the place of every professional owner and sales-agent on the premises, and return the function of guiding interchange to the disinterested. salaried hands of the non-owning Central Office. He would promptly, emphatically and finally abolish the institution of private ownership-in-industry, so far as his authority extended, leaving in its place merely the long familiar factory-system.

The author challenges any reader to procure from any chamber of commerce, board of trade, association of manufacturers or other society of businessmen any serious refutation of this position. All that he demands of the business-world is that it shall have the manhood to preach what it everywhere practices.

Industrial Anarchy.—Does any reader who loves law, order and efficiency regard it as too strong language to call such a chaos of artificial antagonisms, duplicated efforts, desertions from the ranks of production, decisions by force or silliness rather than by reason, *guidance by short-sighted individual avarice rather than by far-sighted communal selfishness,* and utter waste of opportunities as that of our imaginary factory, "industrial anarchy"?

Is it other than common sense, from the most practical standpoint of the man of affairs, to call the combative essence of all this intricate running to and fro, this seeking to gain advantage by force of nerve rather than by activity in production, by countervailing another's efforts rather than cooperating with them, by forcing down prices which are to be paid and forcing up prices which are to be received, "economic militarism"?

Is it extreme and radical "agitation," or merely fidelity to truth, to call "tribute" those moneys paid to owners who deliberately block interchange by raising prices, until they have charged "all the traffic will bear"; or those received by sales-agents who subconsciously, but just as effectively, block interchange by adding to the natural cost of production (in their retail-prices to the Consumer) the manifold costs of their haggling?

Such moneys seem to the author just as plainly tribute, and exacted for precisely the same reasons, as were the shameful sums paid by the United States, about a century ago, to the governments of northern Africa. For in both cases the tribute was paid merely *for the privilege of interchange unmolested by piracy.* Only, when we paid the tribute, a century ago, to the barbarians, we got what we bought. But to-day, when we pay it into the commercial maelstrom, we do not.

Or it may seem to some that this simile of a modern factory imaginably permeated with ownership-in-industry is too grotesque for practical force. Yet we shall see, as the historical facts are investigated, that the changes indicated in this supposititious case have been more than paralleled by the whole trend of American conditions throughout the last seventy-five years. Indeed, this inexpressible inefficiency of our illustration is really slight, because of the minor scale upon which the model is drawn, when compared with the gross inefficiency now prevalent throughout our land, upon a national scale, merely because *no premises, no buildings, no materials, no appliances, nor any opportunity for work or trade whatever, may be utilized by the community for its life-support, except as it happens* *to prove selfishly profitable to certain individuals, who are allowed to "own" them, to permit it.*

The Great Economic Question of the Day.—The question before the patriotic student of American internal problems, therefore, is not as to the desirability or undesirability of ownership-in-industry, as an institution. That must be considered settled by the unanimous sentiment of every employer of labor in the land. *The sole question is as to its permanence. What is the direction of its growth—toward disappearance, or toward exaggeration?*

Is its present form some tattered remnant of the crude cottage-system of earlier days, which we have inherited from the past unwillingly, but of which we are ridding ourselves as rapidly as possible? Or is ownership-in-industry a modern institution, new in economic history, which we have developed out of modern invention, and which is growing upon us uncontrollably with time?

Are we growing ahead of it, or is it growing upon us? Which way are we headed? That is the prime question in the study of American economic evolution. That is the question to which all later investigation of facts herein will be directed. It is not the momentary facts which are of importance, but the direction and rate of our motion.

American Caste.—But, before we return to statistical history it should be noted that, so far as the opinions of the man-in-the-street are concerned, this American insistence upon ownership-in-industry, as a sacred and inviolable prerogative, does not appear to the candid observer to be any less of a national superstition than is caste in India. For there is seldom any disposition to reason as to its worth or unworth. It is accepted quite unthinkingly—and then enforced as rigidly as if it were a part of our national constitution.

The same men who enforce non-ownership-in-industry upon the nine-tenths of the whole population which works in their factories are also the ones responsible for the maintenance and defense of ownership-in-industry among themselves. Their attitude is hopelessly inconsistent and unreasoning. If we could only persuade our businessmen to preach what they practice, we should have a new economic system in no time.

The sole distinction between oriental caste and this national American economic superstition of ours is that caste is hereditary and inviolable, whereas ownership-in-industry is not wholly so. American commercialism, however founded upon inconsistency and superstition, is not a caste, nor does it depend upon anything inherent in individual character. This is obvious because *every day thousands of individuals are crossing, in both directions, the invisible line between the productive and combative departments of economic effort.*

On the one hand there is not a factory-department to-day which was not, ten or twenty or fifty years ago—assuming that its processes have been that long in existence—a separately owned enterprise. There is not a day passes that somewhere a step from the cottage-system of separate ownership toward the factory-system of non-ownership is not taken, in the consolidation under common ownership of what before were separate properties. Thus does separate ownership-in-industry disappear, and factory-system co-operation takes its place.

Nor, on the other hand, is there a day slips by without a step being taken somewhere in the opposite direction, toward separate ownership-in-industry, not by a reversion from consolidation to disgregation, but by the injection into some fairly unified industry of *a new and intruding novelty due to invention, multiplying steps in manufacture and hence disgregation in ownership.* Thus does separate ownership arise from a continuous source, decentralizing industry in spite of concurrent consolidations.

Invention the Economic Perturbator.—For invention is a prime characteristic of the day. It is now proceeding at a rate higher than ever before in history. While it is true that some invention is carried on professionally, by salaried men employed by the larger corporations for just that purpose, yet the majority of successful inventions arise as the private property of the inventor.

Each such leads to the formation of a new business-entity, built upon the monopoly inherent in the patent. Across the increasingly numerous gaps in ownership thus created between the new industry and the old ones, interchange must be effected as best it may, by the bargaining methods illustrated in connection with the imaginary factory poisoned with ownership-in-industry.

The Dual Progress of Economic Evolution.—Both of these processes: (1) The aggregation and consolidation of separately owned industries into unity under a single factory-system, on the one hand, and (2) the disgregation of ownership by the creation of new business-enterprises, through invention, on the other, are familiar to every businessman. Both processes are peculiarly characteristic of American economic life. Indeed, it is to trace the comparative evolution of these two processes in American economic history which forms the chief task of this book.

But by some freak of fortune it is the former process alone which has happened to catch the popular, the editorial and the sociological eye, in the past, as being a brake upon progress and an offender against justice. It is this which has led to the constant clamor against "the trusts," as the source of every economic evil. But the equal or greater importance of the other tendency as an economic destructant—the choking growth of anarchic commercial competition amongst multiplying hordes of separate, antagonistic ownerships, steadily raising prices—has escaped almost without notice.

American Economic Evolution.—The economic history of America, then, has comprised three distinct lines of advance. These three lines must be accurately defined and properly related in mind before our present social condition, or the direction in which we are trending, may be correctly understood. They are:

(1) *Invention,* considered purely as a mechanic art.

(2) *Continual Decentralization of Ownership,* by the creation, through this invention, of new businesses, separately owned, between which and all previously existing concerns interchange can occur only by the methods outlined in the illustration of the imaginary factory permeated with ownership-in-industry.

(3) *The Gradual Substitution of the Non-ownership Factory-system for the Separate Ownership of the Cottage-system, by Consolidation.*

Whereas the first two processes depend upon individual genius for invention, the last is purely a matter of organization. It prevails wherever inventions can be used independently of the inventors, by reason of either the expiration or the purchase of their patent-rights. It is the usual ultimate result of commercial competition, and involves often thousands of inventions, new and old, patented and unpatented, within the single resultant productive unit.

The relative order of the three processes, as cause and effect, is shown in the order of their statement. Invention creates decentralized ownership. Decentralized ownership leads to ruinous commercial competition. Commercial competition ends in consolidation.

Economic Lag.—But it is an axiom in natural science that a result always lags behind its cause. There are always more inventions being created than can ever reach the status of commercial vitality. There are always more disgregated ownerships resulting from invention than can be consolidated into unitary, non-ownership factory-systems. Time is required for results to follow causes. Therefore the process of centralization always lags behind that of decentralization, and the net result is a relative decentralization.

This general statement made from an inductive basis will be found corroborated by the facts of history. To anticipate some later quotations from statistics, American history has revealed activity in invention as its prime causative characteristic. The next largest of its great departments of effort is activity in questions of separate ownership (feeding upon this invention). Trailing after these come its various other departments—factory-production, technical progress, education, religion, charity, etc., etc. Startling as has been the growth of the American factory-system or of American technology, *the growth of American commercialism has far exceeded them both.*

Take, for example, the invention of the automobile, which was not controlled by basic patent. Its adoption has brought together, on the one hand, armies of skilled mechanics in factories of a size and perfection of organization and efficiency never before known. But, on the other hand, it has created a hundred new business entities in the form of central automobile-factories, and tens of thousands of smaller independent concerns each manufacturing or selling some one of the myriad of tools or accessories connected with the automobile-trade; and all of these new concerns, big and little, must interchange with each other, with all those existing before, and with the Ultimate Consumer, by bargaining over each transfer of a screw-driver, to a tremendous expansion of all that sort of activity which was condemned as obviously parasitical in the imaginary factory. A whole literature would be required to cover this single field of progress.

Consistency.—To the impartial student, witnessing able men of affairs carrying order and efficiency to the marvelous degree visible in their own factories, in single portions of the automobile-trade or elsewhere, it is incomprehensible that these same men should never have attacked—by word, at least, if acts are impossible—that nauseating anarchy of dissociation, antagonism, duplication or multiplication of effort, unstandardized result and general inefficiency toward the Consumer, which is obvious in the automobile-trade considered as a whole. It is still less comprehensible that they should never have recognized the larger, national business-world as this same anarchy expanded a thousand fold.

Our Compass-course.—Of these three lines of social advance mentioned above, it may be assumed that the first, invention, is wholly beneficial. The entire civilized world seems to be agreed that progress in invention is the one thing most to be desired and encouraged; and in this doctrine America leads.

But because invention, and increasingly rapid invention, is involving us everywhere, willy-nilly, in an increasingly puzzling tangle of these two other processes of social evolution, it becomes necessary to examine the latter most carefully. Which of these two processes dominates the other?

Are we becoming gradually more centralized by commercial consolidation, or are we becoming more rapidly decentralized by invention? Are we drifting toward a state of affairs wherein our national problems will pivot upon the tyranny of huge combinations of capital, as so many believe and fear? Or is the coming crisis to be one characterized by a congestion of a myriad of undigested novelties, in an anarchy of ultra-decentralized commercial competition?

The wisdom or the folly, not only of federal legislation but of world-policies, hinges upon the facts as to this alternative. It does seem as if the question deserved better attention at the hands of the professional sociologists than it has received. The facts are not difficult of access.

Our Growing Minuend.—Of course, if the number of business-enterprises in a land were fixed, then one might be justified in concluding, because consolidation is observed on every hand, that our decentralization must be diminished by this subtraction, that our ownership-in-industry must be undergoing reduction by concentration, through consolidation. These are the premises universally assumed by educated people and professional economists to be the truth.

But this assumption is quite without foundation. For if, while ten businesses are being consolidated into one, *a hundred new ones are formed,* wherein lies the resultant centralization of enterprise, and hence the reduction of antagonistic ownership-in-industry?

Into this basic question no entry will be made at present, beyond noting its importance, and that modern social science leaves it unanswered. The prime task now is to rid the field of false assumptions and prejudices, to clarify and define ideas, and thus pave the way for an intelligent inquiry later as to the historical facts.

The Modern Factory-system.—The true factory-system, then, becomes visible to modern eyes as the productive part of the primitive cottage-system, now magnified by modern tools, power, transportation and communication, *but simultaneously purified of all ownership-in-industry.* It must now be understood as including superintendence, design, invention, interchange and transportation, as well as mere labor at bench and machine. It must, in its national sense, include every function of real assistance to the life-support of the Ultimate Consumer.

Therefore in its national aspect it must also include, in addition to the unitary factory proper, that intangible co-operation between the productive forces of separately owned factories, the selling-offices of which may be in active antagonism. For in their actual interchange of goods these factories do cooperate, to a degree, in spite of the hindrance to this function due to the commercial competition between their owners.

In order to realize this the reader must recognize that the correlation of the many separate factories of the land as producers, interchanging goods and services, may and does constitute one distinct organization of economic energy—a real, living, energy-producing entity—while the correlation of the selling-forces of those same factories in commercial competition, as distinct business-enterprises, does actually constitute a separate and directly contrasted organization—or disorganization. This is true in spite of the fact that each of these two great, national, parallel fields of action is split into thousands of nominally separate business-entities. It is true in spite of the fact that many a businessman may, and often does, shift his activities from one to the other of these organizations without leaving his chair. *We are engaged in classifying not individuals, but activities.*

Leaving the second of these two great organizations of social energy for discussion in the next chapter, a final word must be given in emphasis of the vital importance to modern life of the first: that great, intricate, international network of organizations of individual effort which alone maintains, through what degree of co-operation it may find possible under commercialism, the life-support of the hundreds of millions of Ultimate Consumers, namely, *the Factory-system.* In the factory-system, in this broad but accurate sense, is found the sole source of all our visible material growth in worldly prosperity, and the main source of advance in knowledge, or even spiritual power; for it is by means of the factory-system alone that those intellectual and spiritual springs of inspiration, which are likely always to remain individual in character, find adequate communication, through books, periodicals, schools, lectures, etc., with the millions which they otherwise could not reach.

As we have progressed from the days of hand-looms, dip-candles and hand-cut nails to those wherein a nail is no longer worth picking up when dropped, the gradual adoption of this wonderful modern factory-system has permitted the countries employing it to multiply in population like rabbits, and their creature-comforts to increase in dazzling ratio. There is no other method of organizing industrial effort yet known, nor even suggested, which is comparable with it in efficiency. Everything which we now enjoy we owe to the factory-system.

Economic Motive-forces.—Yet this wonderful factory-system. it is noted, is quite devoid of any other incentive to industry than wages or salaries—or royalties or fees which are merely disguised wages. The same is true as to all interchange within the factory-system. *All of its functions proceed most actively when promoted only by the natural human desire to get a thing done, for the natural, life-supporting value thereof, rather than by any desire for pecuniary advantage over a fellow.*

It is indubitable from all this unvarying evidence, coming from our most active and gigantic field of production and interchange—that field which comprises nine-tenths of all our active population, and which alone produces all which we now consume and enjoy—that *the mere natural desire to inter-*

change, for biological rather than pecuniary reasons, is a motive force quite sufficient to promote the act. No advertising nor hawking of any sort is found requisite, in a factory, for getting a pattern into the foundry, or a completed chair into the varnish-shop.

The factory-system, too, never makes any appeal to ambition for riches, because riches are virtually never gained through salary or wages for productive effort, but only through profits or dividends won by commercial combat. It makes no appeal to enterprise or "initiative," in the sense of starting some new scheme for the exaction of additional profits or dividends from the Ultimate Consumer; for all such enterprise it sternly outlaws, as destructive of efficiency of aggregate results. Its vigor and fertility and progressiveness rest solely upon the one hand, upon that love of craft which is inherent in every human being, and which will emerge productively whenever assurance prevails of an individual reward even approximating the value produced for society. It rests, upon the other hand, upon that endless demand of the Ultimate Consumer for life-support, which must ever grow endlessly upon what it receives.

Profit-sharing.—Not even the microscopic prevalence of the profit-sharing plan, when properly analyzed, stands in negation of this statement; for no profit-sharing plan yet proposed has ever gone to the extent of incurring the slightest danger that the "hands" might share sufficiently in the stock *to control the fight for profits and dividends.* The control, and therefore the lion's share in the profits, has always been kept safely in commercial hands. There was never any intention that it should be otherwise.

The profit-sharer is merely a minority-stockholder, upon the smallest conceivable scale; and the minority-stockholder is increasingly being recognized as a cat's-paw class, which loses at the commercial game almost as hopelessly as does labor. This fact labor is beginning to appreciate. It is beginning to realize that it is better off as undisguised labor than it is as a profit-sharer—a sexless mixture of emasculated labor with barren capitalism.

Moreover, even if this impossible extreme where the profit-sharer might imaginably control the business were ever seriously contemplated and adopted, as is sometimes true in so-called co-operative societies, it would not amount to any slightest annulment of the contrast between production and commercialism which forms our text. Labor would thereby merely have come to mingle within a single individual *portions of two contrasted sorts of activity,* as is true of so many officials of manufacturing corporations. The profit-sharing wage-earners would thereby merely have ceased, temporarily, to be out-and-out producers, by becoming partners in the commercial fight for dividends, just as the corporation-official sometimes drops his combat for profits to give a bit of attention to production.

Neither of them has thereby altered in any slightest degree the ineradicable characteristics of either the factory-system or the ownership-in-industry system, by their momentary shift from one to the other. The profit-sharer would merely have abandoned the former, for the moment, as so many are doing in a myriad of ways all the time, to increase the latter by their joining somewhat in its more lucrative occupation of fighting over the spoils. And thereby they must inevitably make both themselves and everyone else, on the average, poorer, by reducing the purchasing-power of every dollar in the land.

Summary.—The factory-system, instead of relying upon those methods of appeal to the Consumer to exchange his money for goods, or to the capitalist to supply the appliances needed by labor, which are so familiar in the commercial world, provides merely, instead, for *the universal privilege of use of all its facilities by any of its members, under proper superintendence, without other charge than for depreciation, and without importunity.* It proffers to every workman the enjoyment of every appliance which he is fit to use, upon virtually unlimited credit. But it never permits him to own it.

It also establishes ideally free interchange of materials, without negotiation as to price as a preliminary, under the guiding agency of a Central Office. Yet this Central Office itself never negotiates. It merely transmits from the Ultimate Consumer to the original producer (or, in the existing factory, so far in this direction as its jurisdiction may extend), and vice versa, the will of each.

By this Central Office the willingness of the producer to labor is transmitted, to the person who next receives his output, in a form containing no tax beyond the clerical cost of transmission. Word as to the volume of goods acceptable to the

Consumer goes back to the producer in a similarly efficient manner.

These unhampered privileges of use and interchange have been maintained so long before us, as natural essentials to the welfare and efficiency of the little community within every factory, that we have become unconscious of their presence, their value and their significance. Although they are diametrically opposed, in principle, to the spirit of the entire business-world, yet their right has never been questioned by any businessman, but has been upheld in fact by all.

Yet the factory-system seems to have failed completely in public recognition, through our official agents for such matters—the university-economists and the journalists—of these its four most important lines of value, namely:

(1) A system in which ownership-in-industry is everywhere prohibited;

(2) One in which monopoly is everywhere enforced; and

(3) One where credit is universally extended without interest-charge; yet

(4) One where the volume, rate and ease of production, interchange and improvement of goods reaches the maximum known to human experience.

Our Factory-system Incomplete.—It is obvious, too, that a wide extension of our factory-system, into fields and populations now strange to it, is possible. In view of the predominant proportion of the nation's activities which are now being absorbed in questions of ownership-in-industry, it is plain that such an extension might be made to include much of the best human material which we possess, which is now going to waste in business-offices.

Indeed, the aim of this entire chapter has been to suggest that the proportion of what factory-system we now enjoy, relatively to that which we might just as well enjoy, is the same as that between the productive and the total energies respectively in our imaginary modern factory permeated with ownership-in-industry. This ratio, judging superficially, cannot be less than several fold, and easily may be ten or twentyfold. This ratio, it is to be remembered, is not one of populations, but of *energies*.

Discontent.—Along with the incalculable gains to society as a whole which have resulted from the adoption of the factory-system, there has also been a simultaneous growth, it is true, of a worldwide, obvious and increasing discontent among those working under it. But further analysis is needed before responsibility for this may be properly placed.

In the first place, this discontent is shared by millions living outside the factory-system. In the second place, if the factory-system has grown enormously, so also has the unsystematic fabric of contentious ownership-in-industry—and the latter, we shall see, at an even higher rate.

There is no *a priori* reason why all social ills or labor-discontent should be attributed to one rather than to the other of these diametrically opposed systems. Surely, if the former, on its face, is productive, while the latter is destructive—and if both are growing fast, but the latter faster—it is more natural to place responsibility upon the latter, until some opposite be proven.

In the following chapters the contrast in character between these two inevitable results of modern mechanical invention—the non-owning factory-system and the ownership-in-industry unsystem respectively—will be traced further in detail. But, however deeply such a search may penetrate the labyrinths of modern industry and commerce, it must never be forgotten, amidst the distractions of intricate detail, that, however proper may be the institution of private ownership in its proper sphere—Ultimate Consumption—yet that *ownership-in-industry is the direct opposite, in nature and result, of production. It is not itself productive; it lives only as a parasite upon production.*

This fact may not be questioned by any businessman, and least of all by any manufacturer or employer of labor; because every one of these, without even a single exception, *rigidly excludes personal ownership of tools, raw materials or produce, and all commercial competition, from all the industry over which he exercises control.* This is as true, too, of the banker, the promoter or the sales-manager who has only a few bookkeepers or stenographers in his working-force, or of the merchant having only a single "clerk" or a few hundred shop-girls, as it is of the owner of the largest factory, the deepest mine or the longest railway, controlling tens of thousands of men in overalls.

The Basic Contrast Running through All Energetic Sciences.—This contrast between industry-without-ownership, as in the factory-system, and ownership-in-industry, as universal throughout the commercial world, is the basic one in economics. It is only by means of this contrast that a path may be blazed into the deepest mysteries of the subject. It is only by planting our feet firmly upon this basic distinction that we may acquire a real science of social energetics, fit to stand side by side with the other energetic sciences and able to predict future events as they predict them—foretelling a war or revolution as accurately as astronomy foretells an eclipse, or gauging a yet unbuilt conformation of society as nicely as we now estimate the performance of an unlaunched steamship.

To readers who are scientifically inclined this definition of the field of scientific sociology may be supported by the explanation that, in this now formative science of social energetics, this contrast between production and commercialism plays the same basic, distinctive and guiding part as that between the two opposed factors—conservative and dissipative respectively—which give to every natural science its dual aspect. Such a basic dual contrast, for instance, is that between elasticity and impact in the science of mechanics of solids, or between fluidity and viscosity in hydraulics and pneumatics, or between conductivity and resistance in electricity, or between translucence and opacity in radiation, or between adiabatic and isothermal in heat-action, or that between reversible and irreversible changes in any cyclical activity whatever, or that between the broader principles of conservation and degradation in cosmic energetics, or that between peace and war in politics—that fundamental contrast which pervades every corner of the universe, which runs through all the natural sciences, which forms the guide for every effective laboratory-investigation, and which has led reliably to the solution of the most difficult problems, in each line of technical progress, which have been solved in recent years.

Therefore from this point forward it will be assumed that political economy, if it is really to aspire to a peerage with the other natural sciences, in its foundation not only upon statistical fact but upon scientific principles relating fact with fact, and if it be ambitious to acquire that ability to predict which is the test of accuracy and reliability in every other science, then it *must* start from, be based upon and guided by this same contrast—that between conservative and dissipative activities—which underlies all human knowledge of energy and action. The only precaution needed is to define carefully for the special field of social energetics. Although what follows may confine itself to simple, concrete, economic facts, yet this high goal is the real end in view.

At this point, therefore, the reader must select his allegiance and nail his colors to the mast. If he has followed and accepted, in the main, this distinction between the crude anarchy of the cottage-system—ownership-in-industry—on the one hand, and the efficiency of the orderly, co-operative, non-owning factory-system on the other, as the basic one between inefficiency and efficiency, between archaic crudity and rational progress, then let him proceed in this book. But if he has failed in this he might as well stop here. For the rest of this work is naught but a careful investigation of the relative growth in past American history, and the relative bearing upon present problems, of these two huge and basically contrasted divisions of international economic effort.

CHAPTER VII

THE MARKET-SYSTEM, OR COMMERCIALISM

THE modern market-system is a creature born primarily of modern transportative and communicative facilities. These have extended inconceivably the radius of action of not only every productive center, but also of every selling-agency; and the populations thus affected, we know, must have increased even more rapidly than the square of this radius.

Simultaneously invention has multiplied inconceivably the number of steps in the productive processes of our factory-system. At every one of these rapidly growing number of steps of manufacture, and then of distribution to the multi-millions of Ultimate Consumers, interchange and transportation must enter as a factor; and at every one of these innumerable steps in transportation, and often when no transportation is involved, *negotiation over price* is necessitated by change in ownership.

For instance, each bushel of wheat passing through the port of New York is said to be bought and sold over one hundred times. Yet think of the number of similar transportative steps involved in getting the wheat from farm to bread-eater—including the many sales of the emery with which is ground the valves of the steam-driven mixing-machinery of the modern bakery, and every similarly remote accessory—as compared with the simplicity of the neighborhood-mill and the domestic oven of a century ago. And at each of these steps may occur a multiplication of negotiations. Follow this picture through all the intricacies of corporation-law and patent-litigation involved in this myriad of technical processes, and you may approach some faint conception of the ramifying energy of the modern market-system.

Transportation and Communication.—Glance for a moment at the modern market of Ultimate Consumers, as contrasted with that of a century ago. Relatively speaking, in 1815 there was no transportation of commodities except by water, and that at great risk, with wagon-traffic a remote second. Goods must find a market near their origin or else must remain unconsumed.

A century ago manufacturing-processes were exceedingly simple. Therefore materials went through only one or a few transfers of ownership between raw source and ultimate consumption. Moreover, there was but a slender variety of choice in the goods offered for sale, or of choice between purveyors. The Consumer either bought what was offered by his nearest shop-keeper, or the first pedlar to pass, or else went without—or made it at home.

Production, then unaided by invention and power, was slow and difficult. It absorbed the bulk of the energy available.

Selling, on the other hand, equally unaided by invention, unstimulated by variety of goods, shackled by lack of means for communication, and unenticed by modern congestion of population, absorbed little effort. Energy devoted to selling did not pay. The Ultimate Consumer was either found immediately, or else the search was abandoned.

Now, on the other hand, these conditions have been reversed to an almost inconceivable degree. Transportation spreads commodities over wide ranges of territory, reaching enormous masses of population. Cold storage has annihilated the seasonal limitations of many goods. From the window, as I write, can be seen on a clear day the homes of more people than were to be reached by three weeks of travel in all directions in 1800. By the telephone at my elbow I can talk to a population larger than that of the entire civilized world when Adam Smith wrote his "Wealth of Nations."

Both transportation and communication have multiplied inconceivably the variety of commodities subject to the customer's choice, and have thus made immeasurably more profitable the devotion of effort to influencing that choice. In no field has invention been so active—perhaps because nowhere else so artificially profitable—as in the fields of *communication and display,* which are the salesman's especial aids in the influence of trade over a wide market.

The Line between Production and Commercialism.—So, between this obvious and unavoidable necessity for reaching myriads of remotely scattered Consumers with information as to goods, coming in the greatest variety from numerous and unsystematized sources—which, when reduced to its lowest terms, is a productive task—and the equally obvious destructiveness of personal ownership-in-industry, or commercialism, when introduced into the factory-system—where is the dividing line? Which is the real and productive factory-system, and which the unnecessary, destructive market-system?

Demand Unlimited.—In considering this question the prime fact to be kept in view is that *the Ultimate Consumer always desires to consume.* He needs no inducement whatever. There is no limit to human desire. There is a limit to the people's purchasing-power, it is true—a factor which will be considered later—but none to their desire.

The shoe-salesman, for instance, starts out into a world where *everyone wants more or better shoes.* Yet it seems to require a gigantic organization, backed with ample capital and trained by specialists in salesmanship, in order to persuade the people to buy that which they keenly desire! For many who attempt to sell excellent shoes fail. There is some deep paradox here.

But consider—if there were not a shoe-salesman in existence would the people go barefoot? Is there a human being with so little enterprise that, being ill shod, he would not step into a shoe-store without the enticement of alluring lights and gaudy signs to draw him thither? If there were no shoe-shops at all would not the Consumers go, or collectively send a disinterested agent, to bring shoes from the factory?

Would there then be even a single pair of shoes less than now in use? Indeed, is it not possible that, if shoes could be had at factory-costs, without the far greater cost of selling, there would then be even many more shoes bought—and therefore made, sold and worn—than now?

For when one learns what a large proportion of the price of shoes is mere selling-cost, and when one recalls that *all the money available for spending is going to be spent anyhow,* even if no clever salesman entices, then it becomes clear that that money would buy many more shoes than now, if only the selling-cost were omitted from the price.

Of course, if the salesmen who sell shoes alone went out of existence, leaving the salesmen in all the other lines at work, then the shoe-factories would suffer. The Consumer's money would then be diverted away from shoes to some other commodity, even to the point of poorly shod feet as the price of needless purchases elsewhere.

For clever salesmanship is a real hypnotic power. It is a common phenomenon for it to induce purchases which are not really desired by the Consumer. But it cannot possibly expand the aggregate volume of purchases, for that is determined not at all by psychic desire, whether natural or induced, but solely *by aggregate pecuniary purchasing-power.*

All the money available for spending will be spent anyhow, salesmen or no salesmen. Therefore if all salesmen were outlawed simultaneously, by a universal adoption of the factory-system, then interchange and consumption would be distributed among commodities very much as now, except that *the volume in all lines would be very much greater than now.*

Ultimate versus Intermediate Consumption.—The Ultimate Consumer, when he buys, usually buys only what he actually desires or really needs. The burden of conducting purchases of that sort is a necessary and productive task, in so far as it is not artificially exaggerated by the presence of ownership-in-industry, multiplying unnecessarily the number of retailers.

But under the commercial system the bulk of all buying and selling is not of this sort. It is not done by Ultimate Consumers, but by manufacturers or re-sellers. It has nothing to do with the desires, personal needs nor Ultimate Consumption of the buyers. It is undertaken solely in order to reap a personal pecuniary profit.

Purchases of commodities are made not to enjoy or consume them, but only to sell again. Purchases of securities are made solely for the purpose of drawing interest or dividends. The burden of conducting all these sales and purchases, which is a heavy one to society, is an unmitigated waste.

It is irrelevant to reply to this that unless the Ultimate Consumer wishes an article it is worth nothing to the middleman. If the movement of goods were stimulated and guided solely by the desires of the Ultimate Consumer, they would move from the original factory directly toward him, along the shortest possible path.

But the facts are far from this. Goods now move toward their Ultimate Consumer not so directly as a sailing-ship tacking to windward approaches her port; and we all know how satisfactory that is to modern standards of speed and efficiency.

Then, as a matter of fact, the intermediate commercial buyer needs have no appreciable regard for the question of ultimate consumption. The sole question for him is: "Can I find a man *who believes more than I do* that there will be an ultimate demand for these goods, or that they may be made to command a higher price than I believe? If so I can sell them to him at a proft."

But if it then turns out that the second man was mistaken, it does not follow that he loses what the first man won, the Consumer paying only the natural price which would have been paid if neither of these men had entered the market. Instead, the second man says: "A man must live. If I make a mistake now and then I must still average a net profit." So he tucks upon whatever goods he succeeds in selling a profit sufficient to cover his losses upon those which he cannot sell, and explains the whole as "the cost of handling the goods"—forgetting that nobody ever asked him to handle the goods, that he has had to hustle in order to secure a chance to handle them, and that *the Consumer, who pays all the bills, would be vastly better off if he ceased handling them altogether.*

As for the Consumer, he is helpless. Any refusal on his part to buy of any such an insane arrangement merely leaves him the alternative of buying from another equally bad. The Ultimate Consumer, in this game of commercial buying and selling without the natural cause, is like a base-runner caught between bases, with the basemen trading the ball back and forth over his head. They may make as many passes back and forth as they choose—all to their pleasure and his ultimate discomfiture.

For every profit on every transaction is charged up to the Ultimate Consumer. He must either pay or starve. The bulk of all commercial transactions, including not merely middlemen's speculations but all such variety of commercial and financial ventures as the starting of additional retail-stores, founding new advertising-mediums, launching new brands of old goods, with all the financial, legal and negotiative complications attendant thereon, are all conducted to-day not at all because the Ultimate Consumer who pays for them either desires or needs them, *but solely for the sake of the profits incidental to charging up to, and collecting from, him all those* *unwelcome costs, in the form of mysteriously rising retail-prices.*

Outline of the Market-system.—The market-system thus comprises all economic effort which is not productive in the sense of supporting the life of the Ultimate Consumer. It concerns all sales and purchases not needed by the Ultimate Consumer. It includes all diversion of energy into questions of ownership, price, markets, profits or opportunities for sale, or those necessitated by duplication of effort due to the present anarchic license of any man to enter any commercial field which may seem attractive to him, regardless of the interests of him who must pay all the costs thereof, the Ultimate Consumer.

The sole exception to this definition, which blocks the way to making it sweepingly inclusive of all selling, is that effort which must inevitably be put forth, even under a nationally complete factory-system, by salaried salesmen *each possessing a complete monopoly in his own line and district,* in order to guide the Ultimate Consumer competently toward a wise choice amongst all the commodities produced in that line, all of which are presented for choice simultaneously and impartially. But this is a very small—a barely perceptible—fraction of modern selling-effort.

For under even the most perfect system the Ultimate Consumer needs to be guided and informed. Under any imaginable system accumulations of goods must be maintained for his inspection, or to tide over seasons of surplus or famine. These are natural, inevitable functions. Therefore, in so far as the retailers now actually perform these functions, as they would be performed by a national factory-system, just so far they do now form a part of our actual, if incomplete, factory-system.

But on the other hand, to whatever degree—and it is a major degree—they now waste space, buildings, time and the energy of the public seeking commodities, by their maintenance of a myriad of trivial little stocks, each one incomplete and unsystematized with the others, or unwisely chosen as to locality, and duplicated endlessly; or wherever they entice customers through other than true or complete information, by advertising things already well known, or by stating things which they do not know to be true, or by emphasizing half-truths—all for the sake of private profit, if public loss—they belong to the destructive market-system. *To that degree they arrest, deform, degrade, or destroy life, by increasing its cost and difficulty.*

The Ultimate Consumer the Sole Source of Economic Power.—Because the Ultimate Consumer pays all the bills—for wages, raw material, transportation, profits, selling-costs, rent, interest, profits, dividends, surplus, etc.—he has full right to a choice instructed by the best grade of impartial information which modern science can accord him. He has a right to demand this to a degree of freedom and accuracy far exceeding his present difficulty in discerning what is best, amidst a frantic mob of competing owning-salesmen, each clamoring into his ear a lot of subsidized and misleading half-truths or downright falsehoods, or when forced to run from shop to shop, as now, before he can find that which one visit should have told him.

There is no more sense or reason in our having to trot our feet off in trying to find the best bargain in dry-goods or machine-tools than there would be in postage-stamps, which are now sold (under the factory-system) of one quality and at one price from Eastport to Los Angeles.

This right to an intelligently guided selection on the part of the Ultimate Consumer is a basic one. But it cannot be attained by demands addressed to the helpless tools of the present commercial system. It can be acquired only by the abolition of the present un-system, by denying to all non-consumers who seek to buy in order to re-sell (or in order to extort tribute in the form of rent or interest) the privilege of any ownership-in-industry whatever—as is done in every factory in the land.

Outline-definition of the Market-system.—As features incidental to this undesirable non-consuming ownership, the definition of the market-system must also include all speculative investment or storage for profits or dividends, all agencies, all drumming and advertising, most of all the time and nervous energy now spent in combatively determining wages or salaries, all time lost between jobs, and all financing and promoting. For every one of these losses consists in working hard (or worrying needlessly) to do something which either the Consumer, if relying upon the pure factory-system as his sole support, would not need to have done; or which does not actually aid the factory-system in supporting his life, even when the Consumer may think that it does; or which would get itself done better without any effort, if only the seekers after private profit at public loss would leave the situation alone.

Most briefly, commercialism or the market-system consists in *owning what one doesn't want, because someone else wants it.*

Contributory Commercialism.—The market-system also includes one branch of effort which will prove, as analysis proceeds, to be perhaps the most important of all. This is the widespread diversion of what would otherwise have been productive labor, while still following the forms of what would otherwise have been a factory-system, *into aid to some of the combative commercial activities listed above.*

Thus a shop of printers engaged in printing instructive, entertaining or inspiring books is a part of the national factory-system. But that same lot of men and appliances, when diverted—possibly within an hour—to the printing of unneeded or misleading advertisements which soon reach the waste-basket, becomes thereby a part of the market-system. Similarly a lot of stenographers writing negotiative letters, or a labor-union in its hours of conference over wages, or upon strike, with many another instance of what is apparently a part of the productive system, must all come under the term market-system in its destructive sense.

The fact that the workers in all these instances may draw their pay in the form of wages, or otherwise, has not the slightest weight in determining their economic character. For *it is not that which goeth into a workman, but that which cometh out, which determines his worth to society or to himself.*

The National Market-system.—In the national factory-system the component elements were found to be either individuals or departments, or shops, or entire factories. Similarly in the national market-system, the component elements may be either individuals or entire organizations. In so far as factories actually interchange materials or productive services they together constitute themselves a larger factory-system. But in so far as their selling-offices spend time and effort in negotiation preliminary to such interchange, enforced only by their disgregated ownership, or wherever they sell to outside parties in competition with each other, their negotiative forces thereby constitute a larger national or international market-system.

Commercialism Always Antagonistic.—One consideration differentiating the market-system from the factory-system is that the business of the former is always economic combat. *The exertion is all directed toward counterbalancing and annulling an equal amount of exertion put forth by others.* Work against such obstacles as that inevitably arouses in him who strives a sense of fault in the opposing human being. Failure begets hatred and leaves a corroding bitterness.

Thus two farmers may haggle a week over the price of a cow, each telling all his neighbors what a hard-fisted old skinflint the other is. Yet if neither of them owns the cow—it and the two farms being the property of those who ultimately consume the potatoes, milk, and beef produced—then the cow would be transferred from one farm to the other by an hour's labor, the price being settled on the books of the two farms by a mere clerk, after a few minutes' conference with the two farmers. For whether the price were too low or too high would then be of importance neither to the farmers, to the clerk nor to the Consumer-owners.

Or again, imagine a man who wishes a dozen errands done, facing a dozen boys seeking a job. This man typifies the public of Ultimate Consumers.

Suppose, in the first place, that he follows the plan of selecting one boy after another, assigning to each an errand. That is the factory-system in embryo. Human limitations aside, the selections will be made peaceably and efficiently, the man picking out each boy for the task assigned as wisely as his skill will permit.

The Commercial System in Embryo.—But suppose, in the second place, that the man alters his plan of procedure to the market-system. That is to say, he now scatters upon the ground a dozen tickets, each ticket a commission to run one errand. He then tells the boys to scramble for the tickets. This introduces the feature of combat over ownership of the jobs, as a prerequisite to productive work, where neither combat nor ownership is needed at all. What will be the result of the change in plan?

In the second case will occur no peaceable, efficient co-operation of the twelve boys in the performance of a dozen errands, as in the first instance. Instead will arise war. Now the boys will fight for the tickets, *not* because the boys are any more bellicose in nature than they were the moment before, nor because human nature is incurably prone to fight, but merely because *society* *has insanely arranged matters, in the second case—or insanely omitted to make any arrangement whatever—so that a fight is an unavoidable preliminary to doing any productive work!*

The blame for all war, whether commercial or martial, rests not upon him who fights, when the alternative to fighting has become more destructive to human life than the fight, but upon every obscure him who, through neglect, stupidity, indifference, cupidity or laziness, has allowed a planless situation to arise wherein life cannot continue without a fight.

The Elements of Commercial Economics and Ethics.—The second situation will develop several obvious faults which are so typical of the greater social faults which are now permeating our entire social organization that they are well worth study. These faults in embryo are these:

(1) *The tasks will no longer be distributed, even approximately, to fit the individual power of the boys.* It will be the best fighters, and not the best messengers, who get the jobs.

(2) *The tasks will no longer be distributed evenly.* Some boys will get two or more tickets apiece; others will get none. Those securing more than one ticket will delay the performance of all errands except one, while that is being performed. Meantime other boys who got no tickets will be standing idle.

Congestion and delay upon the one hand; simultaneous lack of employment on the other! Does it look so unlike our actual industrial situation, in the grasp of the market-system?

(3) *No errand can be performed until the fighting is done.* The strength left for speed, and the nerve for nicety of judgment, are what is left after the exhaustion of combat. Therefore there will always result a deficit of both production and employment. Nor could this combat long remain child's play. Starvation awaits him who loses.

(4) *The worst nature of the boys, instead of the best, will be brought to the surface.* Antagonism and bitterness wholly artificial and unnecessary will have been created. Those succeeding will become snobbish. Those who fail will become revengeful.

Ability given no outlet turns to vindictiveness, for inhibition is to human nature what lightning is to milk. Human nature, under this mischievous system, *will seem far worse than it really is.*

(5) *The average cost of each errand will be much increased.*

In consequence the Ultimate Consumer can afford to distribute only a reduced number of tickets, as compared with what would have been possible under the factory-system. This artificial deficit in the normal volume of demand then intensifies the penalty for failure in the fight, and hence the venom of combat, and enlarges the proportion of those who must surely meet defeat and want.

As our analysis develops this simple illustration into the dimensions of our national economic system it will become plain that this last factor—the Consumer's decreasing purchasing-power—is the controlling one in explaining the bulk of the growing bitterness pervading what we call the social problem, in its broadest and deepest aspect.

Human Nature and the Social Problem.—This illustration of the boys demoralized by a wrong system is a parallel with that of the modern factory when permeated with ownership-in-industry, only more elementary. In each case there is no question of human nature. *It is merely one of wisdom or folly in policy of organization, in the face of a human nature which has remained substantially the same since history began.*

Ask any superintendent of any actual messenger-boy service, or any other employer of factory-labor, if he thinks that the scramble-plan is better than the orderly one of assigning work without ownership therein—and therefore without fight over that ownership—and he will declare emphatically in favor of the non-owning plan. But ask that same man if he prefers this same non-owning plan *when it is the Ultimate Consumer who does the hiring,* through the retail-shop as agency, and when it is his own factory-organization whose work is hired thereby, and he will snort his indignant repudiation of the idea. In that case he prefers that the orders which keep his factory going shall be scrambled for in the dirt, by a lot of drummers or jobbers—with the inevitable loss of many orders otherwise possible.

For some reason or other he is mortally afraid of magnifying to a national scale the very policy which permeates his own entire factory, and on which he knows that its efficiency rests. This prejudice and fear prevail almost universally among businessmen. If it is not due to sheer greed, which is reckless of the country's welfare, it can be understood only as an intellectual cowardice which is none the less shameful because manifested by men who would on no account incur the stigma of bodily cowardice.

It is this moral and intellectual timidity on the part of our big men of affairs and our average modest citizen, and not some stupidity or greed on the part of "the other fellow," which is the weak element in human nature which is involving us in all our present troubles. When our capitalist-employers preach what they everywhere practice our social turmoil will cease, and not before.

Social Re-organization.—At this point emphasis must be laid as heavily as space will permit upon the error of one superficial idea, which is met so constantly as to be discouraging beyond measure to anyone seeking a world more wisely organized than this. This false and superficial idea is that "society will be reformed when human nature is reformed."

But in these illustrations of the modern factory permeated with ownership-in-industry, or of the dozen messenger-boys similarly poisoned, *there is no question of human nature whatever!* In each case the actors are just plain, human men or women, quite like the reader.

In each case the human nature is the same under either system. *Yet the results of the two systems are diametrically opposite,* along both economic and moral lines. No conceivable excellence of human nature could prevent the manifestation, under the wrong system, of those gross evils which are inseparable therefrom.

These illustrations prove broadly one of the most basic principles of sociology, namely, that *social phenomena do not depend upon human nature (except as to such basic traits as underlie all phenomena alike), but wholly upon our methods of organizing human nature.* For our social phenomena repeatedly turn inside out over night, so to speak, whereas human nature, if it changes at all, changes very, very slowly, as centuries pass.

Thus, in our present problem, it is not the proposed ideal economic system of the future—in this book nothing more ideal than the long familiar, well proven factory-system—which will place upon human nature a stress beyond its powers of endurance. *It is the present system which already does so.* A large portion of all present immorality will prove, upon examination, to be due merely to the inability of perfectly good human nature to withstand the artificially exaggerated temptations which are imposed, quite unnecessarily, by that foolish lack of all system which we call commercialism.[1]

The Basic Economic Contrast Again.—The inevitable evolution of the pristine cottage-system, under the stimulus of invention, has therefore given to modern civilization, in its economic aspect, a two-faced form. On the one hand has arisen the factory-system, enormous in its bulk, comprising some nine-tenths of the active population; yet drawing this population usually from among the less able, brilliant and aggressive people —although it also includes the underpaid intellectuals of college, laboratory and library. It creates from nature's rawest stores everything with which we support life and make it comfortable. It brings all these things into the hands of those who ultimately consume and destroy them, in the development of an enlarged volume of new life and energy.

On the other hand lies the market-system, also gigantic in its aggregate energy, but contrasted with the factory-system in its smaller population, in its brilliance of display, in its financial scales of magnitude, and in the peculiar sort of manhood which it draws into its ranks—not to be too quickly characterized by any one sweeping adjective, yet everywhere exhibiting a certain unity of character. Whether we regard the baron of finance, the traveling drummer, the department-store merchant, the corner-grocer or the itinerant pedlar, we find in each, mingled with the greatest variety of other attributes, two necessary instincts. One of these is the love of some uncertainty in life, if not of a sheer fight. The other is a keen sense of property.

The typical producer, on the other hand, whether high or low in the social scale, is conspicuous for his lack of both of these. Whether he be an artisan at his bench, or a skilled surgeon, or a scientist, or an educator, he is everywhere alike in his love of peace and of work—not necessarily in the sense of an unusual love for mere exertion, for many commercialists are also intensely active, but of work in the sense of producing something which can afterwards be viewed as an accomplished thing—a work of art, a thing which betters the condition of the human race. This is the sense of craft.

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[1] This idea cannot be understood completely until the chapter upon Unemployment has been read.

With these creditable features of the factory-system apparently must be associated often others equally characteristic, but not equally delightful. These are intense monotony of task, longer hours than prevail in the market-system (except in retail trade), much lower average incomes—approaching always the minimum wage upon which the particular grade of skill in question can maintain itself, from generation to generation—and an incessant pressure toward the reduction of the courteous and esthetic, as well as the pecuniary, sides of life to their minimum.

But these repellant features of factory-life in reality have nothing to do with the factory-system itself. *They are imposed upon it only by the parasitical presence of the market-system.* It is the latter alone which sucks out the life-blood from, and starves into discontent, the most just and perfect system of organizing labor and interchange ever yet devised—the factory-system.

Labor cannot now see that this is so. Nor can the rest of the world, apparently, see that until it sweepingly condemns all commercialism, as the only defect adequate in magnitude to explain the worldwide discontent with factory-conditions, it may never hope to prove to labor that the factory-system is indeed good.

While unquestionably there has been an advance in the administration of our better factories during recent decades, in the direction of providing better light and air, and adding some slight suggestions of beauty, comfort, courtesy and recreation—known in the vernacular as "welfare-work"—yet these advances are by no means universal. It has long been obvious that they are not competent to meet the growing discontent. To the masses of people working in the smaller or less successful factories, or in sweat-shops, or to the unskilled laborers who necessarily drift constantly from factory to factory, or from one construction-camp to another, or to that vast population of petty tradespeople immured in petty shops—all of these buying their supplies through a market-system which everywhere, as a matter of course, "charges all the traffic will bear" —these benefits may never come.

Through the leech-like activities of commercialism, life is inevitably being reduced automatically to the lowest level at which it can continue, without being snuffed out altogether—

and this is a very ugly level of life indeed. It is this which constitutes society's real problem.

For the believer in the gradual reform of factory-conditions must never forget that it is not the factory-life of the factory-worker which needs amelioration, so much as it is his home-life. Yet this latter the welfare-worker cannot touch, with his hard, paternal wand. It must be left autonomous or else ruined.

Moreover, the problem is far wider than either factory or home. It is the conditions which surround and feed (or starve) the worker's home, and not something within it, which must be reformed. Most of all, it is prices of commodities and regularity of employment which need reform.

Even what little has been accomplished in the way of welfare-work has been enforced, rather than spontaneous, by the far more rapid advance in the standards of the market-system in luxury. The dazzling development of the natural habitat of the commercialist: the city-offices and lunch-clubs, the up-town apartments and hotels, the brilliant shops, theaters, social clubs, automobiles, etc., has presented a contrast with the habitat of the productive system—the factory, warehouse and slum—too painful to permit the latter to remain altogether stationary. Yet one can say truly that, while we have been developing our offices, shops, hotels, and theaters with every device known to technical science, we have left the homes of the workers, at their worst, unchanged.

But this method of progress defeats its own end. If we are ever to find social happiness, peace and stability, it will never be on a plan wherein the rich advance by leaps and bounds, dragging after them the poor at a distance which is restrained from complete abandonment only by fear of outraging humanity to the point of explosive revolt.

Discontent and social instability arise only from disparity and injustice. It is absurd and childish to point out that the average skilled workman enjoys to-day far more than he had fifty or an hundred years ago. The source of his most natural discontent is that *relatively,* rather than absolutely, he has fallen behind.

He has not progressed at anything like the rate that the negotiators have enjoyed. When the latter are now enjoying a brilliance and luxury of life some three, ten or a hundred times that available a century ago—whichever it may be—what basis is it for content, or what sign of justice, that the artisan enjoys only some three, ten or an hundred *per cent* of advance?

For in the habitat of the negotiators appears increasingly every extreme of contrast with the characteristics of the factory. Order, system and discipline, except as they apply to underlings, are conspicuously absent. While often there prevails the intense energy and assiduity of the fighter, yet even there studiousness and asceticism are unknown. Instead appears the extreme of convenience, luxury, artistic beauty, mental superficiality, brilliant display, subservience to every whim, sometimes even vulgar ostentation, and a continual demand for distraction from monotony or fatigue which borders as nearly as it dares upon the lazy and immoral.

Here and there, it is unquestionable, one uncovers among the commercialists a minority of exceptions to these statements —sporadic instances of real, wholesome, devoted, self-restrained virility and devotion to the world. But it is always in minority. It is not characteristic of the normal inducements of the system. Just as in those rare cases where one find beauty or idealism blossoming amidst the factory-system, these are instances of life persisting in spite of its environment, rather than of one in harmony with its surroundings.

For the very soul of the market-system is ownership, and ownership means license. The man who does not place self-gratification first has handicapped himself against success in the market-system. Indeed, the man who does not own or control something, responsible only to his own ideas as to opportunity, private profit or public need, has no place in the market-world.

The Commercial Tourney.—The prime function of ownership-in-industry is to the modern businessman what horse and armor were to the medieval knight—a means, pretext and license for free wandering, to be spiced with antagonism and mortal combat wherever might appear a chance of profit therein. Society, in discarding its "tin clothes," lost merely the insignia, and not the institution, of knight-errantry.

The man who does not instinctively love a free fight has no place in commercialism. The basic idea of the market is a fight—commercial nerve being the sort of courage, and financial and office paraphernalia the sort of weapons, in use. The whole spirit of the market is win or lose, as one best may. All of the property visible there has been entered solely as counters recording victory or defeat, to suffer confiscation by combat according to set rules. To the larger operators money has long since lost its normal significance, either as dependent upon time-effort or as bearing upon personal comfort; but to the host of smaller commercialists loss is a tragedy.

Yet the man who enters the market, and loses, receives everywhere the same grade of help and sympathy accorded to a twelfth-century knight who came out of a joust with a broken head. In neither case is humanity lacking, expressed in a crude way. But neither then nor now has suspicion been aroused that personal outrage has been done, society demoralized by an exhibition of brute force where reason should have prevailed instead, and all people impoverished, by an utter waste of the best nerve in the land.

Nor has civilization yet advanced to where there is more than a glimmer of perception that law and public opinion should enter to stop the whole thing. Any such an idea is quite unintelligible to the average commercialist, albeit he has always before his eyes the success of the factory-system, in which no combat is ever permitted. It is as incomprehensible to him as would have been to Richard the Lion-hearted a land so governed that no bloody jousts were ever allowed.

We are as thoroughly steeped in our loyalty to our rough-and-tumble market-system as we are to our orderly factory-system, never dreaming that the two ideals and policies constitute hopelessly opposite, contrasted and incompatible extremes. Yet in both these systems the main duty to be accomplished is merely interchange. The main reason for collecting armies of workmen and dozens of departments into a factory, under a common superintendence and Central Office, is for the constant interchange between the workmen of partly finished tasks. *If it were not for this the largest factory-personnel in the land would be that group which perforce must work together on the one largest appliance.*

Likewise in the market-system, the prime reason for collecting tens of thousands of negotiators into a congested nest of skyscrapers, or for the segregation of shops into groups in cities or villages, is apparently to facilitate this same basic need of life: interchange. Although the negotiators in reality are not accomplishing interchange, but are braking it instead, yet they think that they are. They find intercourse personally profitable, however detrimental to the Consumer. So they gravitate into closer and closer congestion, dragging after them all their henchmen and trades-people, to the formation of cities the concentration of which is becoming the despair of modern social intelligence.

Emulation and Competition.—In each of these fields of interchange—the factory or the market—there is always at work, of course, that motive spirit which leads each human being to desire to outstrip his fellows. This spirit is, or may be, just as active within a factory owned by complete monopoly, where everyone is paid wages or salary, as between owner and owner. But in the two cases the effects upon society are exactly opposite. Hence are needed distinctive names for the same motive in the two situations.

The spirit of rivalry at work within the factory, leading each worker to strive to *produce* more, will here be called *emulation.* In this sense, when justly rewarded, emulation is one of the greatest productive forces at the command of man.

But when this same tendency is manifested in the combative market-system, in struggle over ownership or price, prompting each to fight harder and to destroy more of some other person's effort, it will be known here as commercial *competition.* In this sense competition may become, and now probably is, the greatest destructive force known to man, not even excepting war. *For the average daily cost of the Great War, to either Great Britain or America, is not over one-third of America's daily cost of commercial competition, measured merely in dollars.* In both cases the loss in life is worse than that in money.

It is emulation, and not competition, which is the life of trade. Competition throttles it so fatally that competition always has to be replaced, ultimately, by consolidation. (As to this topic, treated in further detail, see the later chapter upon "Economic Equilibrium.")

The greater the rewards for emulation in production become, the more intense will be that creative spirit. But the greater the prizes won by commercial combat or competition become, the less is left to form an incentive for emulation in production. As commercialism grows in brilliance of prosperity, activity and luxury, the factory, as the seat of that emulative production which alone supplies all things consumed, and now increasingly taxed to support commercial militarism, must gradually lose its natural reward, and hence its emulative zest, and must degenerate increasingly into a sodden atmosphere of sullen resignation to poverty, monotony and hopelessness, pierced here and there with flashes of intense bitterness, as black thunder-clouds are rent by lightning.

It has been assumed all but universally, in past economic debate, that it is the factory-system which alone deserves our interest, because it alone feeds us and because labor's reward is thought to be determined there. This assumption has nowhere been so effectively emphasized as by the worldwide propaganda of the socialist movement.

But it is the office of this book to divert attention in the opposite direction, toward the market-system, *because it is this which is starving us.* It is because of the market-system's vital power over every phase of our coming destiny, both as to our physical famine and our political stability, that it deserves the closest attention and most accurate analysis of which the human mind is capable.

CHAPTER VIII

THE EFFICIENCY OF SOCIAL ORGANIZATION

THE contrast between the two sorts of policy in industry which has formed the groundwork for all which has preceded forms the basic factor for measuring the *efficiency or inefficiency* with which a given society has organized itself for its own support. The technical meaning of the word efficiency, it should be remembered, is the proportion of what-comes-out to what-has-been-put-in.

Now it is a basic law of biological equilibrium that what each individual, whether brute or human, expects to get out of life is automatically balanced with its inherent ability to produce its own life-support. While individuals may depart slightly from this law in either direction, toward sloth on the one hand or over-ambition on the other, yet the general tendency is overwhelmingly toward the balance stated.

Thus a clam, under normal environment, naturally expects to accomplish and receive what a clam naturally desires. With the horse, which is far more intelligent and sensitive than the clam, the same law holds true. With an imbecile human being the same holds true. For every grade of life, nervous system and ability, whether brute or human, educated or uneducated, this law holds true, *provided* the opportunity be normal.

But with man, in modern complex society, the opportunity to produce, support life and be happy, and the temptation to be well disposed towards one's neighbors, depends largely, as we saw with the messenger-boys—and to-day we might say overwhelmingly—upon the relative *perfection or efficiency of form of organization* of whatever grades of individual ability happen to be available. Therefore the sole proper concern of the sociologist is *the purity of the relationships formally instituted, whether by statute or by economic tradition and fact, between man and man.* It is his business to relate man to man in such a manner that conflict will be avoided.

Relationships versus Components.—But this task of relating men properly does not depend in any way upon the quality or internal characteristics of the things related. Indeed, inefficient men need to be related properly to each other, in order to avoid impact and friction, just as much, or even more, than efficient men do.

That is to say, questions as to individual human efficiency may belong to the biologist, the physician, the surgeon, the psychologist, the educator or the religionist. They certainly do *not* belong to the sociologist. The skill of the latter is shown where his responsibility lies, namely, *in the right or wrong form of organization of whatever personalities the skill of the biologist, the physician, the psychologist, the educator or the preacher may have made available for his organization.*

To-day, wherever we investigate, we find this principle corroborated. We find the inefficiency of result, and therefore the hope for improvement in the future, to lie far more in our faults of organization of society than in the faults lying within the human individual. But what we fail to grasp to-day is the fact that the study of *organizational faults,* on the one hand, and of *individual faults,* on the other, constitute entirely distinct and contrasted professions.

Thus in the study of the efficiency of a locomotive, for instance, we have two or more distinct professions involved in producing the result. These are (1) the metallurgist, who supplies the component steel, brass, etc., of which it is composed; and (2) the mechanical engineer, or designer, who says how these components shall be put together, as to proportions and relationships, in order to produce the best locomotive. But no engineer is ever so silly as to think that when we have provided ourselves with a stock of good steel, brass, etc., we shall necessarily have a good locomotive, any more than piles of excellent stone, brick, timber, etc., insure the possession of a splendid, or even safe or satisfactory, building.

The engineering profession, and the men-of-affairs whom they serve, have never been disposed to blur the clear distinction between these two callings—which we might call, for convenience, the component and the constructive vocations respectively. They have always been able to discern the wide gap existing between questions of inherent quality of parts, on the one hand, and of relationships between parts, upon the other. The two fields have always been considered distinct professions and given quite different educational approach.

If a locomotive makes a poor record because of poor steel, weak brass or defective boiler-covering, it is never the designer who is blamed. The latter is at fault only if good steel, good brass, etc., have been *so wrongly put together* that impact and friction, or radiation, or incomplete combustion, etc., ensue in undue amount.

Social Architecture.—But, in our groping attempts at a social science, virtually all of the highest authorities confuse these basic issues. They do not know whether they are social designers or bio-psychological metallurgists. They are constantly trying to produce a better society by direct attack upon the individual. By some lucky hit-or-miss of cultivation they hope to evolve a superman, when all that is needed is a natural social organization in which normal men may develop normally.

They are still hopelessly steeped in the primer-grade idea that what constitutes an excellent society is an aggregation of excellent individuals—just as if baking a good cake consisted merely in securing good flour, eggs, etc.—and that society can be made good and efficient only as one first makes its component individuals good and efficient. Are we never to have a real profession of social architects, but only skillful social brickmakers and stone-cutters, who blunder horribly when it comes to designing the structure of society?

Yet the whole basis for modern thought which has been provided by evolutionary science must brand any such an idea as this as obsolete and incompetent, and must start us at the other end of the line—*to make human relationships just and efficient first*—and then to rely upon their wholesome reaction upon the individual to develop whatever superman may be found to be natural. The evolutionary law which places environment as the determinant of the individual applies to man as cogently as to any other form of life.

With man, his most active environment is not topographical, but social. His social environment consists not so much of certain sorts of individuals as it does in *the sort of acts toward him which are enforced upon the ordinary, garden-variety of human beings with whom he happens to be contiguous, by the social relationships embodied in constitution, statute or tradition.*

We cannot alter human nature appreciably, but these relationships we can, and do, tear down and build up most rapidly. Every organizer or superintendent of labor knows these abstract facts intuitively. Every foreman knows well that the efficiency of a lot of workmen can be ruined by wrong handling, in the sense of disorganization, without their natures having undergone any basic change whatever; and that good organization can double the output of some other bunch, without necessarily having converted any of its individuals into near-angels.

It is incomprehensible how the orthodox professors of political economy, whose first responsibility is the efficiency of the nation's industrial system—or our clear thought about it, at least—can fail so utterly to base their science upon this familiar fact. It is puzzling to explain, on the other hand, why the businessmen, who base their every day's work upon this fact, seem to be unable to apply the idea to the nation as a whole.

For, as society grows in population, and in those means for communication which weld into unity vast populations previously discrete, this matter of mutual relationships grows tremendously in importance, while that of personalities wanes. Man finds himself to-day, in spite of widespread industry, patriotism, skill, Christian character and marvelous technical attainments, surprisingly unhappy. Yet he instinctively declines to believe that it is all his own fault. Many people find comfort in believing that it is all somebody else's fault; but most of us welcome a more Christian explanation than that.

Bitter Social Philosophies.—For herein lies the social poison which the seekers after a superman are distilling into society's veins. If all things must have their origin in the individual, *then the only explanation of all our obvious ills is the personal fault of "some other fellow."* It is this philosophy which plays a large part in the recurrence of wars and revolutions. If it does not cause them, it sadly embitters them.

It never seems to occur to anyone, and last of all to our professional sociologists, to explain all these irritating ills in terms of the real cause, namely, *a wrong relationship between each man and his neighbor, while both man and neighbor remain perfectly good men.* For this relationship is a thing which can be remedied, whereas the reform of the individual remains, after four thousand years of endeavor at its solution, the one problem at which we have made no visible progress. We shall have made a long stride toward permanent peace when we have realized that every quarrel between man and man is but the outward manifestation of a mere wrong relationship which both of them, with equal guilt and equal innocence, have allowed, *by mere negligence,* to creep upon them both unawares.

Relationships versus Personalities.—For relationships we can alter, but individuals we cannot. At least, the latest evidence of what nineteen centuries of this line of effort have accomplished is certainly discouraging. Indeed, human attempts at the reform of one's neighbors have seldom netted any gain in happiness. They have usually produced negative results, developing snobbery rather than Christian spirit in the actor, and begetting hatred rather than love in the object.

Even attempted reform at one's self is usually futile, resulting in self-conscious priggishness rather than exalted life. With our advance into the twentieth century we are supposed to have left that childish philosophy behind us.

But reform of human relationships, whether with one's immediate neighbors or for society as a whole, is a field for altruistic effort *which never raises nettles with the wheat.* Reform of our conscious relationships with those with whom we contact is the business of personal religion and ethics. Reform of our formally instituted relationships with the multimillions whom we never meet nor know personally, yet with whom we interact in the most powerful influences now affecting modern life, is the duty of the professional sociologist.

For to-day, in the manifold trials of life, we are affected, as to personalities, only by those with whom we happen to come into actual contact; and these are relatively very few. But simultaneously we have become puppets actuated by huge forces developed and set free by hordes of distant, unknown human beings, *each of them as well-meaning as ourselves, and as unconscious of their influence over us as we are of our influence over them.*

Each of these innumerable unknown companions on the road through life acts only naturally, under the particular circumstances of his individual life. He reacts to his environment of birth, breeding and surroundings exactly as we do to ours—naturally and inevitably. Yet the result is toil and trouble for us both; but only because *we have all been wrongly related,* in a society which has been allowed to acquire population and intricate appliances far more rapidly than it has perfected an organization adequate thereto.

Social versus Individual Evolution.—It is therefore the first duty of the student of economic conditions to trace accurately in history the evolution of industrial relationships, in their broadest sense, quite aside from, or even in direct contrast to, any growth in individual efficiency, whether through education or eugenics. Indeed, to anticipate the ultimate fruits of this investigation, it will actually be found that it is our very growth in individual efficiency and education, as evidenced in the rapid progress of material invention, *which is involving us ever more inextricably in this toil and trouble,* rather than serving for our relief therefrom. It does this by its multiplication of the mechanical intricacies of our social life, yet with no parallel, adequate development of our formal organization of society to correspond.

War and Peace.—Indeed, this has always been the function of eras of peace—to develop, through the arts, an actual form of society which becomes more and more incompatible with the fixed form of government. Thus arises gradually a tide of social impact, friction and discontent. Then has always come, finally, a sudden regaining of equilibrium, in earthquake-fashion, through some war or revolution which accomplished instantly, so to speak, *that reform of the formal relationships of society which should have been performed gradually by debate throughout the preceding decades.*

Virtually every advance in the institutional form of society has been accomplished by war or revolution. Virtually none such of a major sort has been accomplished by the rational debate of times of peace. *War and revolution, however revolting their cost, have been virtually our only educators in civil government and social organization.*

Such has been the universal history of our cruder past. Whether such shall continue to be the history of our near future, which the reader is now engaged in making, is for him to decide. But, if he hopes to act effectively upon this suggestion, to forefend violence, he must do so with the energy and decision which is exercised in time of war. This social problem is no pink tea. If we wish to avoid violence we must accomplish peacefully what violence accomplishes.

In pursuing our present investigation, therefore, our first task is to eliminate all desire for data concerning the individual, when regarded as a *cause.* The acts of the individual are the *result,* and not the cause, of social phenomena.

These social phenomena consist, instead, of a series of constantly changing institutional human relationships—a series which unfolds itself according to natural laws which we are now engaged in identifying, quite independently of any slow development of the individual. This unfolding of history brings unheralded events crashing down upon us, as during the last few years, with a suddenness and unexpectedness which is baldly contrasted with the slow, well planned and diligently cultivated growth of human nature.

The Basic Economic Contrast Again.—In following this idea into economic fields, as our guide in our search for the welfare of the Ultimate Consumer, it is this contrast between that well tried human relationship called the factory-system, on the one hand, and that institution which is called here the market-system, or commercialism, on the other, which forms the prime indicator of social efficiency. This measure of social, or institutional, as contrasted with personal, efficiency finds expression in the proportion prevailing between "value" and "valuation," preliminary definition of which terms were given on page 44. These definitions may now be amplified one step further toward their exact determination in terms of dollars.

Value and Natural Cost.—It will be held here that the sole cost for a commodity to which the Consumer can naturally and justly be held is *that involved in maintaining the factory-system requisite for producing that article and bringing it to him.* This cost will be considered hereinafter to be the *natural cost;* and cost in this natural sense becomes synonymous with *value* and *natural price.*

All costs in addition to this which may be incurred through the artificial antagonisms incidental to ownership-in-industry, where ownership is quite unnecessary, and which form a major factor in all present market-prices, will be held to be unnatural, unnecessary, oppressive and unjust. They should be made impossible also—a thing to be accomplished automatically as soon as ownership-in-industry is made illegal.

In the published analyses of economic problems, whether in the form of treatises upon political economy or essays upon public versus private ownership, there appear the greatest variety of definitions of value, and of methods of accounting. But for the purpose of a scientific analysis of the general economic situation there can be but one method of accounting, and that one based upon this fundamental contrast between the factory- and the market-systems. There can be but one definition of value, and that is *the amount of energy going into or coming out of a thing at the point of Ultimate Consumption,* with supply regarded as performed solely by the factory-system.

For the time and place of Ultimate Consumption is the sole point in the economic system at which it is possible to equate money accurately with human energy. This is the only point at which money represents wholly the transformation of human energies into commodities, or of commodities into human energy, with none of it dissipated into economic heat in impact and friction over ownership. Whereas it has long been vaguely recognizable that money and human life were both forms of energy, and hence were transmutable to a degree, yet it has not been recognized that *only at this point* could the test of transmutation, under the cosmic principle of the conservation of energy, be applied.

Valuation, on the other hand, is the price in money set upon this same commodity when delivered to its Ultimate Consumer through the market-system, with all the loss of efficiency due to commercial impact and friction added thereto. So long as any commercialism whatever exists—that is to say, so long as any ownership is permitted in industry or interchange, anywhere along the line—just to that degree valuation must exceed value, when both are expressed in money. Valuation will exceed the natural price by the cost of the commercialism parasitical thereto.

Efficiency of Economic Organization.—On the average, *valuation must bear the same proportion to value, in money, that the aggregate human energy of the entire industrial and commercial population bears to that portion active in the productive factory-system alone.* For society's aggregate industrial and commercial energy constitutes its current investment in the socio-economic machine or process. But it is the energy active in the national factory-system alone which is transmuted into what society gets out of its investment—Life-support. Therefore the ratio of the latter to the former, following the universal rule for computing efficiencies, must measure the *efficiency of economic organization* prevailing at the time.

This proportion of useful result to investment of effort, it must be repeated and emphasized, depends not at all upon any question as to the efficiency of the individual members of society. All that interminable mystery has been eliminated by our basing our concept of efficiency upon the mere *ratio* of whatever aggregate may come out to whatever aggregate may have gone in.

Thus, we might double or quintuple the average personal efficiency of the individuals concerned; yet, if we did nothing else, we should not have altered our social efficiency thereby in the least. We should be getting out from two to five times as much as before, it is true; but we should also be putting in from two to five times as much. And the incidental losses of energy in commercial combat would be two or five times what they were before.

This proportion of true value, in the form of life-support for the Ultimate Consumer, which lies latent within the expanded valuation which the market-system places upon any commodity, has always been less than one hundred per cent. That is to say, there has always in the past been some economic combat going on, some dissipation of human energy in struggle over ownership. But it is only within recent decades, due partly to a political liberty new to the history of the world, and partly to an unprecedented rate of invention, that this economic dissipation of energy has assumed a dominant importance in social evolution never attained at any earlier period.

But just as, in mechanics or physics, or chemistry, or electricity, we can comprehend phenomena and derive exact, intelligible laws only when our equations are based upon some ideal one-hundred-per-cent hypothesis, so in this present work, *actual economic phenomena must be studied in terms of an ideally perfect organization of economic society.* Only, in this case, all that is asked of the imagination, as its picture of the ideally perfect, is nothing more lovely nor unfamiliar than the homely factory-system—but a factory-system extended to fill completely our social system—that factory-system which has now for a generation or two comprised some nine-tenths of our active population, resulting in the most successful production of material wealth ever known to history.

We know no better economic system than the factory-system. The ideal one-hundred-per-cent held up in this work consists merely in a frankly complete adoption of what we now have—already well tried and zealously approved by every capitalist, employer and man-of-affairs—rather than any chimerical dream of either reforming the individual into some heroic superman nearer the angel, or of devising some new and wonderful conformation of society, the value of which we cannot test until after we have committed ourselves wholly to it.

In any such an ideal one-hundred-per-cent factory-system as this, values and valuations would be identical. Everyone would be organized upon the non-owning, salaried or wage-paid, monopoly-of-his-own-job principle of the factory. No energy would be wasted in determining ownerships where ownership is irrelevant and unnecessary. No two nor ten men would be trying to do one man's job. No twenty men would be trying to do what no one wants done.[1]

Polling the Economic Community.—In attempting to apply statistically to modern society this standard of comparison, the first task is to *list accurately all human skill and effort, whether of muscle or brain, currently devoted to the placing in the hands of the Ultimate Consumer of all that which supports his life, or which he consumes in the belief that it supports life. The aggregate of all this human energy constitutes the national, productive factory-system.*

The aggregate of all this, in money, measures our current national income of *value.* It is, in aggregate, the minimum or natural cost toward which, as a goal, skill in national organization may hope to reduce market-prices to the Ultimate Consumer.

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[1] Anyone who feels that this brief reference to the factory-system as the ideal, one-hundred-per-cent form of society is too vague can find a more developed picture in the later chapter upon Unemployment, Chapter XX. The distinction to be kept in mind in the meantime, in order to understand the author's position, is that, in the existing factory-system no one factory is self-supporting. It makes only one narrow line of commodities. Its members, in order to live, must exchange what they produce, through the intricate channels of the open market outside, for what they need to consume. Thus their lives become dependent upon a system far different from the factory-system, and they suffer accordingly. But in Chapter XX is developed a picture of a single factory making everything, under one organization; in which case the members would buy that which they consume under the same system as that under which they now make what they (virtually) sell—a situation far different from the present.

Next is to be measured statistically *the skill and effort currently devoted to economic combat over ownership, price, etc., or dissipated indirectly by such ownership, wherever ownership is sought for purposes other than Ultimate Consumption.* The aggregate of all this constitutes *the national, combative market-system*—or, more loosely, *commercialism.*

Aggregate Economic Energies.—The grand total of these two classifications or aggregates will be the total economic energy put forth by the nation, destined either to conservation or dissipation respectively. This grand total measures, for the nation, our total *valuation,* or retail market-price.

Ratio of Valuation to Value.—In average for all industries and commodities, *the valuation or market-price to the Ultimate Consumer must bear the same proportion to the natural cost that the grand total of these two economic aggregates bears to the first alone.*

The Sheep and the Goats.—Every person must classify, or his activities must be classified—or his consumption must be classified, if he consumes in idleness—between these two sorts of social economic life, factory-system production or combative commercialism. In many cases the life of an individual is so intimately divided between the two classes that consecutive hours, or even minutes, span the line between. But this fact must never be allowed to confuse us as to the diametrically opposite natures of the two sorts of economic energy. In the fine metabolism of nature the one produces social happiness, and the other unhappiness, as certainly and as accurately as, within the mysterious obscurities of our own bodies, each molecule of food produces life and poison death.

In this statistical determination due consideration must be given, of course, to both the poll, or *numbers* involved, on the one hand, and to *relative ability* on the other. Proper estimate must be made of the relative weight of brains and brawn. All this will receive attention. The aggregates which we seek are those of human energies, regardless of whether muscular or intellectual.

American Economic History.—Speaking briefly in anticipation of the further development of our analysis, the tracing of the relative growth of these two contrasted sorts of economic energy through recent American history will show that, previous to about the middle of the nineteenth century, the western world had been so pre-occupied with, or exhausted by, political or military combat, or, in America, by struggle against the physical obstacles of a virgin continent, that economic combat, or commercialism, had had no appreciable opportunity to develop. But during the last century, and more particularly during its later decades, comparative political stability and military peace, with the completion of our exploration of the North American continent, have opened opportunity for a brilliant acceleration of invention, resultant in a rapid growth and unprecedented unification of vast populations.

The concurrent reaction of this invention, upon the huge population for whose existence it is itself responsible, has resulted in a phenomenal growth of systematic (or anarchic) economic combat, or commercialism, so unprecedented as to warrant the characterization of the present era as distinctly the commercial one of all history. It is to trace more accurately this commercial development which is the first task in attempting to understand American history.

The chronological limits of this commercial era, it will be admitted, cannot be too rigidly defined. Its beginning, as was noted in Chapter I, really occurred in the eighteenth century, as the result of invention, forming the final cause of the eradication of the last vestiges of the feudal system. Interrupted by the Napoleonic wars, it got a second start during the second quarter of the nineteenth century. Arrested momentarily again by the Prussian wars and our own Civil War of the eighteen-sixties, it rebounded into a marked acceleration throughout the period extending from 1865, say, into the present century. Its final acceleration (previously to the Great European War) was derived from the war between Spain and this country in 1898.

Feeding upon the plethora of peace, stimulated by the filling of the American continent with people, and drunken with the absinthe of war-credits, human energy, barred outlet to other sorts of strenuousness, has turned feverishly to the development of commercialism. The modern phenomenon of free economic combat, with all its brilliant trappings and military enthusiasm, has leaped into prominence as a gayly colored but poisonous mushroom springs from rich mold after rain.

Commercialism, with its atmosphere of gigantic profits, imperial luxury and arrogance of success, has proved extremely alluring. Hosts have dropped their productive tasks to hasten into its ranks. Even educated men, specially devoted to social studies, have been unable to perceive its hollow fraud. But a frank and scientific analysis of this mushroom-institution reveals no real nutriment and much virulent poison.

As this growth has occurred increasingly, the modern social problem has arisen. With technical aids to production never so efficient in the past, society is yet daily becoming more dissatisfied with what it has. With means for cheapening the production of commodities such as previous generations could never have imagined, costs and prices are everywhere rising. While the efficiency of the individual is everywhere being magnified by experts in education, the efficiency of economic society as a whole is everywhere obviously declining, through neglect of national economic organization.

It is this last huge topic which constitutes the real task at hand, in this present historical study of American economic evolution. We shall study it as the most important efficiency involved in modern life.

CHAPTER IX

THE WEAPONS OF COMMERCIAL COMBAT

THE task in hand, it has been explained, is the statistical tracing of the degree to which American institutional relationships have been guided into economic inefficiency by the gradual growth of the market-system—or commercialism—under the stimulus of invention, combined with unprecedented political liberty and topographical freedom. But this task cannot be taken up in detail until a better understanding has been had of the subdivisions of this intricate market or commercial system. This is best attained by a study of the several weapons utilized in commercial warfare, and of the methods of their use.

In military combat the manner of campaign is most varied. In one place occurs the headlong charge, in another ambush, in another intrenchment, with counter-sapping, mining and aviation; in another persistent siege, or blockade of trade, or espionage, and so on. And in each sort of warfare a different weapon is used. There is no art of peace which is more varied in its accouterments than that of war.

Nor is the destruction resultant from war only that inflicted directly upon one combatant by another. Much of it, and usually the most horrid part, falls upon non-combatants and is merely incidental to the main action. Sometimes it is intentional, but more often not; but in either case it is equally painful.

Both of these statements are equally true of both political and commercial militarism. Indeed, the parallelism between the two will come out continually, the more one studies commercialism. In commercial combat the manner in which the fighter—or he who profiteers from the fight of others—puts the pressure upon the Ultimate Consumer, to force him to disgorge, is most varied. It is often indirect and often unintentional, so far as hitting the Ultimate Consumer is concerned; but it always hits him, nevertheless.

The instruments utilized in the extortion sweep through a like range of variety. But all of these instruments or methods may be segregated into a few broad classes, as follows:

(1) Passive Control of Land, or Site;

(2) Passive Control of Appliances, including Buildings, Tools, etc.;

(3) Active Control of Appliances, Markets or Avenues of Interchange;

(4) Indirect Waste of Value Incidental to the Direct Combat —this last being probably the largest of the list.

In analyzing all of these sorts of commercial combat we shall take not the slightest heed of whether the combatants are inspired by malice, or other immoral impulse, or not; nor whether they are conscious of doing harm or not. Most of them are doubtless guided by a sincere belief in the righteousness of their acts. Only occasionally does sheer malice rear its head. But to whatever degree these things may or may not be true, we are concerned here not at all in motives, but *only in the net economic results to the community as a whole.*

As a means to prosecuting the analysis these following definitions must be noted:

(A) **Productivity and Wages**

All moneys paid to any person for activity in any of the many varied departments of *production of life-support,* in the factory-system in its broadest sense, as defined above, are properly to be called *wages.*

This idea of wages, it is to be noted, is quite different from the ordinary use of the term, which turns merely upon the fact of money paid for time-effort. But in this present analysis we are interested not at all in the particular form of the workman's income, whether it be paid by the hour, day, week, month, year, piece or job, nor whether it comes in the form of commissions, rebates, fees, contracts, etc., nor whether paid outright by an employer or deducted by the man himself (as the proprietor of the business) from gross receipts, nor whether it reaches him in a yellow envelope or a white one, nor whether in specie or by check.

It is *the character of the deed performed,* and not of the pay received, which classifies economic energy. The sole determinant of true wages is that *it shall be received for effort which really aids in the transformation or transportation of the raw material of the field, forest, mine or sea into the hands of its Ultimate Consumer,* overcoming only natural and inevitable obstacles, under fully informed and unperturbed guidance by the Ultimate Consumer, expressing itself through the familiar, time-honored factory-system.

This use of the word wages is of course different from the ordinary one, in its limits, although in many cases the thing usually called wages is actually true wages, as defined here. But, on the other hand, many payments now called wages cannot be rationally classed, we shall find, with true wages, because contrasted therewith in both origin and effect. Moreover, there are many payments now current which no one now thinks of calling wages, yet which must surely be brought in under the term, because they are identical, in both origin and result, with those wages which most truly represent the idea intended by the term, namely: return by society in money-form, to the producer of life-support, of the value of what he produces for society.

Thus a retail shop-keeper, for instance, when he really performs a service for the Consumer, as is sometimes true, must have his income classed as wages, rather than profits, because it has been earned in supplying life-support to the Ultimate Consumer. The fact that he may derive it in the form of a margin between his buying and selling prices makes no difference to its effect upon the community. It is the effect of the effort, and not the form of the pay, which counts in classifying incomes.

On the other hand, a printer of advertising-matter, or a ticket-seller, or a typist writing negotiative letters, or the usual book-keeper, must have his income and energy classed as commercial, rather than under wages, *because it has been earned in aiding commercial combat.* The fact that it may have been paid to him by an employer in the form of time-wages has nothing to do with its effect upon society.

Real versus Apparent Demand.—Incidentally to the determination of what is wages and what is not, it must be noted that the Consumer, under the present system, apparently "demands," as he buys, a lot of things and services which are condemned herein as of no use to him. But this he does, not because he really desires these things, nor because he is conscious of offering money for them, but *because he is by no means fully informed as to how his money is spent for him by the dealer who handles it.* Indeed, this destination of his money is carefully concealed, and this concealment is protected by law.

Or, even if the Consumer suspects undesired and unauthorized uses of his money by the dealer who acts as his agent, he lacks all power to stop the procedure. For his freedom of choice in the open market, under "free" competition (of which he is so jealously proud), amounts only to a choice between several such dealers, *all of whom are doing substantially the same thing.* Each is virtually like all the rest in his charging the Consumer for a lot of expenses for commercial competition which the latter in no wise desires, and which do the Consumer no good, but rather harm, and which the Consumer has never authorized.

The Consumer normally does not know what he is buying, nor how it was made or procured. Even those factories which are most open for inspection use all manner of materials regarding the natural cost or the purity of which even the factories themselves are ignorant; or, if informed, they are as helpless for reform as is the Ultimate Consumer. Virtually all for which they can be held responsible is what happens on their own premises. Under commercial competition they either must buy cheap or else go out of the business.

While a minority of factories may be able to evade this alternative, through the possession of unusual skill or energy, yet over the heads of the majority it has always held sway as immutably as the law of gravitation. The one formula which has never been of the slightest use in reforming anything is that calling upon the weaker members of the race to be as strong as the most successful. Civilization consists rather in protecting the weak, that they may grow in strength.

But even where both Consumer and manufacturer feel assured of the purity of materials, the former may rest assured of a gross adulteration of *price* by the manufacturer, by his inclusion within it of various costs of commercial combat, both in buying materials and in selling the product. The factory may throw open to the public its work-rooms, but it never does its ledgers! The Consumer knows with certainty only one thing about everything he buys, provided he inquires at all, and that is that *all* of his competing purveyors are charging him, over and above the natural cost of what he desires, the unnatural and unnecessary costs of a battle between themselves.

Political versus Economic Government.—This sort of adulteration of the dollar the political government is constitutionally powerless to prevent. Indeed, there exists nowhere upon earth any government possessing the authority to prevent it. So far as the author is aware, no such form of government has ever been even suggested.

This is the first definite item of fact, among many which may be urged later, in support of the statement already made that we are not governed, to-day, by our political government, but by our economic institutions and traditions. These institutions we may be able to alter, but not through the functions of our political government.

(B) Commercialism and Diluits

When one turns from productive wages to the contrasted moneys and energies of the commercial field, new terms become necessary. So undesirable is the coining of strange words that this entire section of the book was written several times over, using only the familiar word "profits" to designate these moneys.

But the result was hopeless confusion. The word profits has now long been used in the commercial world so loosely that it has lost all accuracy of force or meaning. However carefully it might be re-defined in advance in this book, there would surely arise situations wherein the reader's previously fixed ideas as to profits would lead to misunderstanding.

Moreover, the situation demands at least two new terms, to indicate two novel distinctions in economic argument. If the word profits were retained for one of these, the reader would inevitably attach to the new term used for the other a contrast with what he had always had in mind as profits, whatever that might be.

Therefore the only way to insure a distinct understanding of these new and more accurate ideas is to use two novel names for them. Although these two terms are to cover economic quantities which largely consist of the many different things which are commonly called profits, yet the aim is to distinguish from the common idea of profits.

Diluits.—For all the different sorts of income which are not wages as defined above, therefore, when considered in aggregate, will be used the word *diluits.*

The word diluits is based upon the same Latin derivation as diluents, and is intended to convey the same significance, merely the termination being altered into similitude with profits. For it will be established later that *all moneys and efforts here classified as diluits serve merely to dilute the purchasing-power of the Consumer's every dollar, wherever throughout the land it may be spent, by whatever sort of a spender, or for whatever sort of goods or services.*

This is the basic idea with which the reader is to step from our illustration of the factory imaginably permeated with ownership-in-industry into the field of money as a measure of human energy.

Under the broad heading of *diluits of commercialism* come these following sub-classifications of income:

(1) **Rent.**—The money extracted from the Consumer through the control of Land—or more properly, *Site*—is *Rent.*

The word rent is now commonly used to include income derived from the ownership of buildings, as well as land; but this is improper. Income from buildings should properly be called interest. This is so because buildings are a fruit of labor, whereas site is not. Income from ownership of the fruits of labor classifies as interest, in contradistinction with rent as income from the ownership of site.

In its effect upon society in general, and upon the Ultimate Consumer in particular, this distinction between rent and interest possesses no weight whatever. The two are equally burdensome and equally unjust. But because the single-tax doctrines have given a prominence to this distinction which we feel it does not deserve, it is important to have it at least accurately defined in mind.

(2) **Interest and Dividends.**—The money extracted from the Ultimate Consumer through the control of artificial *appliances,* including buildings as well as tools, etc., will be called interest or dividends indiscriminately.

In the commercial world there is a technical difference between interest and dividends, but this is of no consequence in a scientific analysis made from the standpoint of the Consumer. Both interest and dividends are squeezed from the Consumer by a pressure of passive ownership of things made by man and needed in industry. They stand in contradistinction to rent, on the one hand, which is extracted by passive control of a site originally made valuable by God, and enhanced by the efforts of society as a whole; and in further contradistinction, on the other hand, with value extracted from the Consumer by the active exertions of commercial combat—a form of economic dissipation to receive a name below.

The term dividends as used in the commercial world is broader than mere interest, for dividends are in actuality often paid from funds accumulated through rent, interest, profits and surplus together. But since dividends are justified in the eyes of the commercial world by their percentage-relation to capital invested, quite in parallel and in fluid equilibrium with interest, the term will be used here indiscriminately with interest.

It will be noted that this classification ignores any idea that interest is paid by the borrower. This is intentional. *The borrower is merely an agent of the Ultimate Consumer.* He is an unauthorized agent, it is true; but that makes him no less an agent.

For the Ultimate Consumer is the only person who can, and the only one who actually does, pay all interest and dividends. The borrower is not possibly a source of economic energy, as is the Consumer. He might become one by turning Consumer, or he might become a source of biological energy by turning producer. But as a mere borrower he is neither. Therefore he cannot pay interest. Not paying, he has no rightful authority.

(3) **Entropits.**—The moneys extracted from the Ultimate Consumer by the *Active Control of Appliances, Markets or Opportunities for Interchange* will be called *entropits.* That is to say, whereas the terms rent and interest cover destructive *passivity* in ownership-in-industry, the term entropits covers destructive, dissipative *activity* in ownership-in-industry.

This word entropits has been coined from the same Greek base as the word entropy, which was invented by Professor Clausius in 1865 to cover what proved later to be the disgregation of the molecule, in heat action, and the dissipation of the energy present, by such processes as *friction, impact, conduction or radiation.* The terminal syllable has been altered into similitude with the word profit.

All of these processes are antagonistic and dissipative in their nature, in contradistinction to the conservative processes upon which efficiency in thermodynamic action (the production of power from heat) depends. They are all active in their nature. Therefore they correspond scientifically with the dissipation of energy, in the economic field, in commercial friction and impact over ownership-in-industry.

The idea of entropits parallels roughly what is commonly known as gross profits. It excludes, however, those things commonly classed as profits which have been shown above to be really wages, rent or interest. The distinguishing characteristic of entropits is that *it covers only moneys received for activity concerned with price, ownership or opportunity for interchange,* as distinguished on the one hand from wages received for activity in production, and on the other from interest derived from passivity in ownership-in-industry.

As with the other sorts of income, the classification has nothing to do with the form of payment, nor with any distinct funds. A single check or pay-envelope may include portions of wages, rent, interest and entropits, intermingled together, with no book-keeper sufficiently skilled to tell one from the other. But in the fine metabolism of economic society the contrasted human energies represented by each of these are distinguished, as to result upon society, as unerringly as the walls of the stomach distinguish the molecules of food from those of poison, and both from inert foreign matter.

(3*a*) **Costs of Doing Business.**—The term entropits is a gross one, and includes the moneys paid, often in the form of wages, to hirelings who aid the commercialist in his combat, but who have no share in the risk or reward. Such moneys are commonly called the *costs of doing business*—although this last, as commonly used, normally includes rent and interest also. Here the term "cost of doing business" will be reserved, when accuracy is of importance, to mean only wages or salaries paid for active aid in commercial combat. After such costs have been deducted, entropits becomes our scientific parallel with what is commonly called net profits.

All of these distinctions will become clear if it be kept in mind that we are no longer attempting to classify forms of income itself, which was the self-imposed task of the earlier economists, but *forms of social function* by which the income is acquired.

The distinction between gross entropits and net profits is not an important one in effect, but merely for clarity of thought. Whether the moneys extracted from the Ultimate Consumer by commercial impact and friction be paid out as wages, to hirelings whose productive abilities have been diverted to waste by the commercialist-employer, or remain in the latter's hands as net profits, is all one to society as a whole. In either case they constitute sheer waste, and serve only to dilute the purchasing-power of the Consumer's dollar.

Indeed, some of the enterprises most burdensome to the Consumer make little or no net profits. This is true of all those businesses which, as reported by their owners, have all their profits eaten up in competition.

Some of the current leaks of purchasing-power which are most burdensome to the poor, on the other hand, take the form of *a distribution of wages to workers who are as poor and underpaid as are those whom their work impoverishes.* Such workers, indeed, impoverish themselves. This is largely true of such wage-earners as stenographers, bookkeepers and office-cleaning women, for instance, who aid the commercial fighters.

This distinction between net entropits and cost of doing business bears as heavily upon the issue raised by orthodox socialism as does that raised by the single-tax doctrines upon the distinction between rent and interest. The socialists lay all blame for poverty upon capitalism. Yet, as a matter of fact, *a large and increasing portion of it rests upon wage-earners.*

To be sure, these wage-earners may be morally guiltless, because helpless to alter the situation. But so also must the capitalists appear to be, the more carefully one examines the situation.

This classification of commercial incomes and energies, being unfamiliar, needs further examination in detail.

Rent.—At the basis of every economic system lies the question of rent, the plan by which society distributes to its members various *sites,* of divers values, for their use and enjoyment. For before one may enter the questions which attach to the equities of other forms of wealth, sites, with their relative advantages and disadvantages, form the first threshold to productive opportunity of any sort whatever. It is the obviousness of this fact which has led to the prominence, in all agitation for reform, of the land-question. It is this which explains the wide favor of the single-tax program.

Now sites are unquestionably the creation of God, as to topography, and of society as to their environment. Therefore, as a matter of obvious equity, no one may lay claim to ownership of any site without both blasphemy against God and treason against society.

For instance, the rental value which Manhattan Island possessed in Henry Hudson's time was created by God, and so obviously belongs to society as a whole. *That which it has acquired since then is due to the activities of society as a whole, and therefore belongs to society as a whole.*

The use of a site, as of a tool in a factory, must naturally be reserved to the individual, in order that productive enterprise may proceed. But the current *value* thereof, as distinguished from the user's wages, due to time-effort, he must render to society, as true, natural rent.

What, from this point of view, is the natural, the ideal, the "hundred-per-cent" nature of rent? Further, have we gained or lost by our departure from it in our inheritance and maintenance of the present system of private ownership in land?

Since society as a whole has inherited the right to all natural advantage of every site, and has actually created every artificial advantage, *all payments of rent must be made, in effect, to society as a whole.* As to the amounts of such payments, they would naturally be fixed, under any system, as apparently they are now, by equilibrium between supply and demand, determined by auction from time to time. Under any just system simple precautions will be taken against undue hardship or injustice in evicting a holding tenant. But this once said, the land must always be held available for the needs of society's growth, and the rights of any tenant subservient to the interests of society as a whole.

These payments of rent, made to and expended for society as a unit, would most naturally go toward public service or improvements. But however this might be in detail, in effect it must amount to a distribution of the whole to all citizens, each citizen receiving his share upon the basis of that equality before the state which has long been held and proven to be foundation of all our liberties.

Thus the net effect of this natural or hundred-per-cent system of rent would be that each citizen would enjoy an equal *income from rent.* His outgo might be what he pleased, but his income would be fixed, so far as true rent is concerned, and equal to that of all his neighbors.

Hence every citizen electing to enjoy a site above the average in productivity would pay more rent to the community than he received. He would thus pay net rent. But each person electing to enjoy a site of less than the average productivity, on the other hand, would pay less rent than he received. He would therefore enjoy, in effect, an income of net rent, received in some form of life-support or another, if not in money.

Receipt and Payment of Rent.—Now what, as a mere question of pecuniary gain rather than of equity, is the position of the average citizen, under our present system of rent, in contrast with this natural, hundred-per-cent system? Take for illustration the common case of a family in medium circumstances which enjoys a moderate income of wages or salary, helped out by rent or interest or dividends from the ownership of a small property—for the illustration applies equally to any of these three.

There is no class of society which opposes so bitterly as this any plan for the abolition of rent, interest or dividends. It can see only that it loses something. The fact that it might gain far more than it loses never "gets through."

Yet what is the actual, net fact? Such a family, each time it spends a dollar across the shop-counter, is *paying* rent, interest and dividends upon untold valuations and intricacies of site, building and appliance, in factory, warehouse, railway, etc. Indeed, a major fraction of the family's entire income must go to pay these tributes to commercial warfare, including profits and contributive costs, which do it no atom of good. Reserving figures for later use, it may be said that if all these useless features of commercial cost were cut out *this family could buy and enjoy at least twice as much as now,* on wages or salary alone, as compared with gross income, including rent received, now. But the advocate of commercialism never stops to think that far.

Inertia.—The author knows of no school of social philosophy which urges that the present plan of private ownership of land-valuations offers any advantages over the natural one. It has been inherited without question from the past. It stays solely as the guest of mental and social inertia.

The splendid gospel as to the nature of rent which was preached forty years ago by Henry George has received wide academic debate, it is true, and its sound core has furnished seed which has rooted deeply in American public opinion. An important proportion of all thinking people are single-taxers. But the movement still remains academic in form.

Yet Henry George was deeply in error in ascribing all economic ills to the private ownership of land alone, and this error is now generally recognized in liberal circles. For ownership in land is in no wise demarked from that of the other features needed for industry. Some of the heaviest and most unnatural burdens borne by the Consumer come from activities which make little or no use of land, and which would remain unaffected by any conceivable reform in rent. Capitalism can be transferred from ownership of land to other ownership-in-industry in perfect fluidity, without dulling in the least its effectiveness against the interests of the Ultimate Consumer.

Land-titles.—Historically the original titles to land, both here and in Europe, go back to claims resting upon pure combat, either military or commercial. The lands were not only won by combat, but they have been held ever since for that same purpose, in effect.

To a degree, it is true, the titles to farm-lands in this country (if we overlook Indian rights) go back to squatter or homestead rights. But the bulk of such rights were secured from the government for speculative rather than productive purposes. Much of this land has since been absorbed into towns and cities, and has undergone transfer after transfer, each adding its increment of valuation, each converting more completely the spirit of the title from productive to combative. So remote and obscure, indeed, is the nature of the origin of any title to land that any effort at justifying present incomes on the basis of ancient equities is not worthy of serious consideration.

But whatever might be such embryonic equities of these titles, the growth of land-values since then is much like that of a picture, for instance, which the original painter may have sold for ten dollars, in order to keep his pot boiling, but which society ultimately appraises at ten thousand—usually after the painter is dead. Society lauds the painter as a great artist, accrediting him with contribution to the highest advance of civilization. But it proves itself far from civilized, at the same time, by inconsistently and unjustly allowing the $9990 which he created to remain the lawful property of the various art-dealers who had happened to speculate upon the value of the painting since its creation.

Society forgets that its delay, or stupidity, or grossness of taste, in appraising the picture can never affect the fact that, whatever may prove ultimately to be its value, *that value was created by the painter.* Society must consider itself the custodian of that value until it is paid. It owes it to the painter far more literally than it owes the rent on its art-museums. It is now an anarchist in fact, in its brutal lack of organized attitude toward the painter, far more than if it refused to pay its rent. It cannot pose as the patron of art in any effective degree until it first guarantees to the artist the recognized value of what he has produced.

Now in the case of real estate it is society which is the creator, rather than any individual. In allowing private titles to land to continue, while society is daily investing its labor and brains in making those sites more valuable, it is defrauding itself as foolishly as if a poor painter should encourage the speculation in art which robs him of his proper pay. The curators of both our artistic creations and our land-values should be non-owning, salaried public agents, reserving in each case the increment of all ultimate appraisals to the original creator—to the individual in the case of the painting, and to society as a whole in the case of the land.

CHAPTER X

INTEREST AND DIVIDENDS

Turning now to that particular weapon of commercial combat which is herein to be known as interest, but which in the commercial world often masquerades under the name of dividends, we encounter an institution which has risen to such transcendent importance in the economic history of America that it demands at least a special chapter of its own. There is no other topic of such supreme import to modern society as the nature of interest. There is no other one feature of the social organism which handles anything like the current volume of wealth as this, nor which guides toward happiness or unhappiness so many lives.

There is no other one institution—excepting possibly the twin brother of interest, commercial competition—which forms such a menacing sword of Damocles as this, suspended as by a hair above our political government and our national destiny. Therefore no treatise on political economy may lay claim to authority which does not debate at the outset this question of the nature of interest, doing so incisively as to the interests of society as a whole. No public question can be approached intelligently without a full comprehension of its essentials.

No theorizing of any sort is competent unless it recognizes interest and competition as together forming the two legs upon which stalks, just now, our entire commercial world-civilization to its fate. No apology is necessary, therefore, for detaining the reader with a careful review of the nature of interest, before proceeding further with the historical outline of America's economic progress.

Interest versus Dividends.—For the present, the minor differences between interest on bonds, commercial paper or personal loans, as contrasted with dividends on stock, will be overlooked. The same remark applies to some so-called profits, which include wrongly sums which are in reality interest. Whatever the name, the essential character of interest is that it is money paid *by the Ultimate Consumer* (and not by the borrower) for the privilege of use of certain artificial appliances of industry, such as buildings, tools, railways, stores of material, etc., the legal ownership of which is vested in certain individuals.

These payments are never, as things go now, made directly by the Ultimate Consumer, who alone pays all interest, to the owner of the appliances. The appliances are used by manufacturers or middlemen or retailers who supply the Ultimate Consumer, and who act as his agent in paying the tax called interest to the owner. This tax is then charged up to the Consumer in the retail-price of the goods produced, and collected from him across the retail shop-counter.

It is to be noted that in every such case the owner of the appliances not only makes no use of them himself, but that he has no interest nor pleasure in that ownership, *except that of receiving the tax called interest or dividends.* He invests indifferently in a South African diamond-mine, a Cuban cigar-factory or an American railway; in potatoes, gasoline or cosmetics. With him there is not the slightest pretense of any craftsman's interest, Consumer's desire, collector's taste nor any other human passion connected with the tangible property itself.

None is expected. The sane investor asks himself only two questions concerning any proposed investment:

(1) What interest will it pay?

(2) What are the chances for getting my principal back again?

There is no aspect of human life so utterly bloodless as that of commercial investment. There has hardly been a writer, from Chaucer to Charles Dickens, who felt the human pulse and whose words have survived for that reason, who did not despise commercialism and interest from the bottom of his heart.

It is true that there is a minority of investors, such as officials of corporations, who carry investment in the securities of their own corporation, in whose work they may be psychologically as well as financially interested. But this is merely because such securities fall better within their judgment as to worth than do strange ones.

It is in just such cases, indeed, that the contrast between the psychological interest of the workman loving his work, and the financial interest of the owner caring for nothing except revenue, becomes most impressive, when both are embodied within the same individual. For it is the former alone, which receives inadequate reward and enjoys virtually no outlet, which is of value to society. The latter, which is valueless or destructive to society, is the only one amply rewarded by society.

Expansion of Facilities.—The community is constantly growing in population, territory, invention, wealth, intricacy and standard of living. All of these sorts of expansion are continually demanding a corresponding extension of material appliances and facilities for industry. But at any point where the need for such further extension arises, the question always arises with it: How can the Consumers needing the extension secure the materials and labor requisite therefor?

In the factory-system the answer to this question is always simple. All that is needed is a requisition upon the stock-room.

In the factory-system the maintenance of an accumulation of surplus materials is always a department as important as any other. These materials are held subject to requisition by the Central Office in behalf of any man who, as that Office decides, should use the materials for making some extension useful to the factory-community. So soon as separate ownership of the materials is eliminated the problem resolves itself into beautiful simplicity.

But modern society does not know enough to maintain its own Stock Room and Central Office, nor to eliminate separate ownership-in-industry. So, when the Consumer wishes an extension of facilities he is told to apply to the financier, who will loan him the paper equivalent of ownership of the needed materials, taxing him interest until the loan is repaid. As incidental props to this apparently simple plan has grown up that entire fabric of promoters, bankers, brokers, clerks, exchanges, etc., known as the financial system.

All this is inexcusably cumbrous and expensive, in comparison with the simpler one of the factory-system, which makes no paper loan and charges no interest, but advances the materials upon untaxed credit. Yet this simple statement of the financial method just given, so obviously inferior to the factory-system method of financing, is so much better than the reality in the commercial world that it is inadequate as more than a starter on our investigation.

Initiative.—For in the actual world the Ultimate Consumer, who pays all the bills and who is theoretically supposed to take the initiative in expressing desire for that for which he is to pay, *is never permitted by the commercialists to enjoy that prerogative, of being the first to ask for the loan.* Instead, it is the business of the financier, as a shrewd businessman, to foresee the need of the Consumer for the extension in question, and then to corral in advance the means for its gratification.

The man who, witnessing a shipwreck off-shore, should prepare a stock of coffee and sandwiches against the drifting in of half-dead survivors, to whom they were to be sold at a dollar a plate, would be actuated by motives which, in their economic aspect, are identical with those of the shrewd financier who secures a franchise, or establishes a market, for facilities which he knows the community will soon have to have or die of congestion. Morally the two cases are different only because society is able to see all the factors in the case of the shipwreck, but becomes confused by the intricacy of fact in the case of the franchise, charter or "vested interest." But in social effect the two cases are peas out of one pod.

The pressure upon sheer life and death involved in the need of a great, congested city for transit-facilities, not to mention food, shelter, clothing and amusement—the last being one of the real necessaries of life—is no whit less tragic, however less obvious, than that of shipwrecked seamen. Yet society, in its blind loyalty to a commercial system which it never deliberately adopted, and which it doesn't know why it owns, offers its richest premiums for the encouragement of just this spirit of exploiting the shipwrecked. And it cannot stop it until it prohibits all ownership-in-industry.

It is admittedly true that the work of the financier or promoter requires foresight and energy. So does that of the life-saver on the beach, who does the exact opposite from exploiting the shipwrecked. But so also does piracy. So also does that of the discoverers in medical and surgical science, in astronomy, physics or chemistry, in legislation or jurisprudence. It might even be suggested that so also does that of the truly scientific sociologist.

All of these most diverse and contrasted occupations require foresight, energy, skill, industry and force of character. But the energy or the like going into an enterprise is no measure at all of its value to society. *It is what comes out which determines that.*

Yet none of these later vocations in the list do we reward with huge, unaccounted ownerships, fluctuating hourly in Wall Street, exacting tribute from the Ultimate Consumers for life, and then inheritable for generation after generation. We do not need to do so. No department of life is making more rapid progress, or maintains its routine more efficiently, than these wholesome vocations paid only by salary or wages—and often by not much of that. Commercialism, which alone is making greater apparent progress, is growing more rapidly only in an undesirable aspect. Even life-saving on the beach was never done efficiently until it was removed from the field of chance adventure for indeterminate profit, and was placed upon a salaried basis—entrusted no longer either to the unreliable impulses of altruism or to the back-acting inducements of commercialism, but organized simply as one department of our vast national factory-system.

Tradition.—Let us face this issue honestly. In the contrast between commercial and scientific rewards we are dealing with no basic, unalterable distinction whatever. All is arbitrary tradition. We might just as easily reward our promoters with salaries and our scientists with dividends, if we chose. The only difference would be that then we should lose a lot of our present commercial "initiative," without which we should be far better off, and a lot of science without which we should be far worse off.

All through the industrial world the situation is the same in essential, however differing in detail. The investments of the capitalists everywhere reveal themselves, upon examination, as mere forestallings of the public need, made deliberately as a hold-up and sanctioned only by custom. *These investments are never requested by the public, but always by the investor.* The truth of this does not depend upon the size of the enterprise. When a new grocery-store is to be installed, for instance, those who are to support it financially, the Ultimate Consumers, are never consulted first, any more than when it is a railway or an oil-refinery which is involved.

The active, expensive scramble for railway and other franchises, in the earlier days when there were still franchises to be given away, stands in parallel with the present clamor in Wall Street and before our public commissions for continual expansion of the *opportunities for investment* in industrial enterprises, in the refunding of railway or other securities, or what not. In the general country, outside of the financial centers, the constant multiplication of small shops, new corporations, expanding valuations of dwellings, etc., performs the same function—more diffused in form, but greater in aggregate volume.

There is not a fact sticking out of the whole financial field which warrants the idea that investment is regarded by financiers as a burden. There is none so prominent as the fact that investment is everywhere regarded as an *opportunity,* everywhere eagerly—even frantically—sought.

Commercial Propaganda.—The doctrine common in the careless philosophy of the street, and found even in the responsible lecture-halls of our universities, that he who pays interest ever begs the investor to invest, is one impossible of momentary defense. This doctrine prevails only because it is to the interest of the commercial world not to have it attacked. Their instillation of such doctrine into the people, through every channel influenced by wealth, is just as insincere in its origin—or as unhappy in its self-delusion, if you prefer—and in either case as deplorable in its effect—as is that taught the German people by the Prussian military oligarchy.

The capitalist, it is true, is constantly under importunity from the borrower or promoter to invest; *but this is only because it is not the borrower nor the promoter who pays the interest.* It is the Ultimate Consumer alone, for whom neither the borrower nor the promoter is acting as an authorized agent, who pays. Never would the borrower borrow, nor the promoter promote, if he did not expect the Ultimate Consumer to more than reimburse him for his interest-payments. Everyone possessing the leisure and education of a capitalist knows this.

Risk in Commercialism.—As to the speculative risk assumed by the investor or promoter, in thus anticipating the needs of the community, that belongs in the same class with the risk incurred by the speculator in art, or anything else, or the investor in a ship to be used for privateering or piracy. No sane nor really civilized community would ever permit any individual to assume that risk. The risk taken by the commercialist is exactly that, for instance, of the privateer in national defense against a foreign foe—picturesque, *extremely profitable* (*upon the average*) *to the privateer,* and supposedly patriotic; but actually harmful and dangerous to society, and therefore disloyal in effect.

When governments were so poorly organized that adequate navies were unknown, privateering was permitted as a necessity. In those days the ships of Drake and Hawkins, which have handed down to us our highest ideals of sailor-manhood, fought just as bravely, and perhaps more efficiently, than those of the royal navy *of that day.* But this was not because privateering is inherently more efficient than a navy, but because then the navy was an undeveloped, unappreciated and neglected institution, the possibilities of which were quite misunderstood.

So long as privateering was allowed at all, its glittering allurements were sure to deceive thus the public mind. But we are now far enough away from the blinding glare of such profits to realize that the navy was then poor not because it was royal, but because the stupidity of that day quite failed to comprehend the possibilities of a navy *so well developed that no privateer could dream of rivaling it.* For Drake and Hawkins, with their tubby little sailing-ships, represented almost the highest possibilities of privateering, while the furthest fruits of the governmental organization of our defense by sea we have not yet attained in our most magnificent battleships.

To modern notions of social development and national stability, privateering, when not sheer piracy, was so impotent a reliance in the face of attack as to constitute treason in effect. The "Invincible" Spanish Armada, of the sixteenth century, threatened not only England's freedom to trade upon the high seas, but also the sole nucleus of political liberty then remaining upon the soil of Europe, in the English system of that day. The imbecility of government, such as that of Queen Elizabeth, which allowed it to enter the English Channel unhindered by any organized preparedness in London, and opposed only by the gallant privateers of various small channel-ports, is to-day inconceivable. It certainly amounted to treason to civilization.

We now deem such imbecility characteristic of an age far more crude and stupid than our own shrewd times. Yet in our present stress of internal economic affairs we insist upon an exactly parallel reliance upon privateering for profit, as our sole defense against the menace of impending famine and high prices—that menace which history has proven, time and again, to be far more portentous of national disaster and unspeakable human misery than has been any external attack by foreign foe.

The crisis which resulted from this policy in 1588, when Elizabeth's throne trembled for days in hazardous balance, may make picturesque reading for future generations. But we who thrill so pleasantly over the spectacle of risk, heroism, noise and color now recognize the situation too plainly as a crazy hell of disorganization, irresponsibility and inefficiency to call it a real civilization. We now see plainly that the privateers should never for a moment have been permitted to assume the risk—*not the risk to themselves, but that to the nation and to civilization.* Would to heaven that we had the same clarity of vision concerning our modern commercial privateers!

Initiative and Expansion in the Factory-system.—For the natural answer to all this modern anarchy of commercial investment, as our reliance for securing extensions of facilities —with its grave danger that, under it, we may not even be able to maintain our present rate of production—is nothing more radical nor fanciful than the mere extension of the well tried factory-system, which has so long comprised over nine-tenths of the population, *to include all the rest.* Every factory maintains a stock of surplus material. If the factory-system were co-extensive with the nation this stock would include all food, clothing and every conceivable line of factory-product, from stove-bolts to beans, and all would be publicly available for the making of extensions.

All would be available without asking favor of a single capitalist, nor incurring a dollar of liability for future interest-payments. Whatever risk of loss might be involved in building extensions, the value of which only the future could reveal, it would fall, like the gains, upon the community as a whole.

More than that, *the whole of this loss would be visible when the supplies were requisitioned.* No future failure could add to them. No commercial margins would have to be added. No unpaid loans could arise in the future, demanding repayment out of other enterprises. No unpaid, unpayable debts would be handed down to posterity. There might be disappointment, but there never could be unexpected loss.

Do you reply: "Such public opportunity would develop gigantic graft"? Remember, then, that *that is exactly what they said in Elizabeth's day concerning a royal navy—and for the same reason.*

For then they did not need to predict graft. It was already there, upon a scale to shame modern pikers! The navy was horribly corrupt.

But that fact had no bearing whatever upon any comparison between the navy, as a system, and privateering. We see now that it had none then. It has none to-day.

Then the navy was corrupt because of the privateering. When privateers were permitted to make habitually such huge fortunes, no one could afford to be a seaman without making money out of his calling. Although it took time to free the navy of corruption, *the abolition of privateering was a necessary first step, not a final result.*

This fact the English chose to learn, in their dogged English way, through generations of hideously cruel history. We Americans pride ourselves upon being more facile in learning, without waiting for hard experience of our own to teach us.

Actual Extensions of Facilities.—For it must be remembered, as to the modern economic problem, that all extensions of facilities are now actually made in the face of two unalterable facts. These are that (1) The extensions are achieved, even now, under commercialism, not by any drafts against the future, so far as materials are concerned, but *only by drafts upon our actual, existing accumulations of factory-surplus of material,* wherever they may be or whoever may own them. No conceivable system of finance or credit can (immediately and of itself) possibly expand these material resources by a single brick or bolt—although a faulty system may tie up and render useless many a brick and bolt already there. Our problem, whenever we may need an extension, is always *merely to find access to the material now lying ready.*

(2) The second fact is that, whenever these same accumulations of material are wanted for an extension of the facilities of *the same factory which produced them,* no loan is executed, no securities are issued and no interest-tax is collected. All that is needed is a non-interest-bearing factory-requisition.

Or, if it be true that the former cumbrous procedure is occasionally followed, it is not for the sake of procuring the materials, *but for the privilege of collecting from the Ultimate Consumer the interest upon the indebtedness thus artificially created.*[1] But normally no interest is ever charged by any department or stock-room of any factory for the loan of supplies or services needed by some other department.

The reason for this is simple. Any such a charge would come back immediately upon the factory as a whole, because it is a unit-organization of ownership. Any such charge would be absurd and useless. Whenever dividends or interest are collected it must, in order to have any point at all, be done *across* a gap in ownership. Dividends or interest are merely evidence of discontinuity of ownership, permitted unwisely in the face of a continuity of need. They are no evidence at all of service rendered.

Capital versus Capitalism.—This stock-room accumulation of materials and spare service which forms a part of every factory, and which in aggregate constitutes society's sole resource for material growth, is purely *capital.* It is the only thing which is capital. It is the only thing needed by any manufacturing community for the extension of its facilities in any direction whatever.

Yet before this accumulation may become available for use there must be issued from the Central Office certain paper orders, called requisitions. These requisitions constitute the prototype, in the pure factory-system, of all that variety of papers which are called in the commercial world "interest-bearing securities," "commercial paper," etc. They constitute the circulating-medium of the factory-system. They are the only natural credit-instruments—and before this book is finished the instruments for the transmission of fluid credit will be seen to be the most important and vital of all factors for social metabolism and stability.

All such paper requisitions, *if they draw no interest, as in the actual factory,* are mere representations of real capital for convenience of record. They themselves are worthless in negotiation. Their proper function—fluidity of transmission of credit—they perform perfectly. But that is all. They possess no inherent tendency to expand. They do not dominate nor perturb life in any way. They merely aid it.

But if these scraps of paper draw interest, as is always true in the commercial world, then they become a very different matter indeed. Because they carry with them the special privilege of exacting the tribute called interest, they now become actively negotiable. For the same reason they possess an irresistible tendency to expand in volume.

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[1] Note the case of the Kansas City Union Depot, cited on page 279.

For these reasons they now exercise an important—a dominant —influence upon the fluidity of our credit, the purchasing-power of our money, our hiring-power for labor, and many other things. Therefore they deserve a name to themselves.

They have ceased merely to represent capital, as was the pure function of the factory-requisitions. They were never capital itself. Yet they have become our main reliance as a circulating-medium.

Therefore they are now called *capitalism*. But capitalism, it must never be forgotten, is an institution distinct from and contrasted with true capital in every conceivable way.

In our actual factory-system, as now directed by our ablest businessmen, these paper requisitions upon the nation's surplus stock of material and service never draw interest. This is because the sole object of their issue, under that system, is *interchange and increase in production.*

But in the commercial world these papers *always draw interest.* This is because virtually *the sole reason for their issue, under that system, is the extraction of interest from the Ultimate Consumer.*

It is true that ostensibly the issue of commercial paper is for the purpose of facilitating productive effort. To some slight degree, and so far as the real commercial purpose of the paper—interest—is not interfered with, they do facilitate productive activity.

But the latter function is quite secondary to the former. Anyone who doubts it needs only to note that *securities which fail to draw interest cannot be issued*—or cannot stay issued. It is one of the heaviest indictments against the commercial system that this is so—that no enterprise may possibly be launched or continued, to-day, unless it is capable, in addition to paying all natural expenses and serving the community, of paying a substantial return upon its securities in interest or dividends.

This situation has been explained at length in order to anticipate and negative the argument, so common on the street and in university-economics, that capitalism and interest are essential prerequisites to the expansion of facilities. This, indeed, his nothing to do with the matter, except as a plausible excuse for the enjoyment of unearned income. Not only do the capitalists themselves systematically ignore, in their relations with the public, that system for extending facilities (without the burden of interest-payments) which they themselves enforce within every factory which they control, but *they expend money and effort freely in resisting strenuously every effort of the public to have the non-interest-burdened factory-system adopted, in substitution for the interest-laden commercial one.*

Theories of Interest.—When one seeks an explanation of the nature of interest in the economic text-books one is always referred back to the original history of the investment. In this policy we concur—only that we shall try to get our history true to fact.

In this reduction to origin all the current theories of interest (and there are several, none of them accepted as authoritative) may be reduced to two classes. One of these, which we shall call the Walker theory, although not confining ourselves to the language of Walker, is based upon the *nature of the effort* which produced the accumulation. The other, which may be called the Fisher theory, is based upon the *time-factor involved in the method of use* of the capitalism.

Both theories start with the idea that capitalism begins in a surplus productive power on the part of a true producer, over his current needs for life-support; which surplus power, coupled with frugality, enables the skilled, industrious and thrifty producer to accumulate a material surplus. This surplus he loans to the unthrifty producer, who can better afford to pay him interest than to forego the use of the capital.

Both theories, too, are content to argue the equity of interest from the standpoint of borrower and lender alone. They quite overlook the vital concern which society, as a whole, must have in any contract between these two. Yet society is a third contracting-party in questions of investment, just as vitally interested as it is in contracts involving slavery, or as it is in the marriage-contract. The people who urge that borrowers and lenders have a right to do just as they please are placing themselves, however unconsciously, in exactly the same mental and moral category with those who argue excuse for slavery, or prostitution, or unrecompensed free love, as things in which only the principals are concerned.

The various theories of interest we shall examine first in their unofficial form, in which they float about the world of economic discussion. Later they will be chased down to the details of official language.

Interest Warranted by Original Act.—First comes the contention that the interest drawn by the capitalist is a right based upon his original industry and frugality, whereby wages were saved and accumulated until they gave him power over his fellowmen.

But for each day's work done, or each job finished, in this original industry *the embryo capitalist was paid in full, with wages which, however he may quarrel with them from the workman's point of view, he can never, as a capitalist, say were insufficient or inequitable.* Therefore there is no basis whatever for any argument that, to reward thrift, their purchasing-power must in equity be eked out with interest-payments.

Even from the viewpoint of the workman, if the wages were then regarded as insufficient, there was no contention on either side that the deficit would or should be made up later in the form of interest. They should have been made up in the form of wages, paid then instead of later.

Yet, if it be true that the workman was fully paid in the first place, then *no later demand for any further payment whatever, whether called interest or by any other name, can be based upon the origin of the wealth.* Whatever may be the equity urged in support of the capitalist's receipt of interest, it *must* be based upon some act of his, truly in the interest of society, *performed at a date subsequent to the acquisition of the wealth invested.*

As a matter of fact, this position is upheld by every fact concerning the commercial world; for the vast majority of all personal wealth now drawing interest, came into its owner's hands long since he ever performed any wage-earning labor.

The fact is that every capitalist to-day, so far as he has any consistent economic views whatever, holds that the wages actually paid for the original work did fully imburse the workman with the value of what he had produced. To take any other position would involve the capitalists of to-day in a pretty lien against their properties, from the claims of past labor for deficits in proper wages—or for wages saved and lost in the attempt to make good the deficit by investment in the capitalistic system! Not all the title-guarantee companies in America could make valid the title to any piece of commercial property against such a gigantic lien as that! If sustained, it would throw all the huge incomes of modern commercialism to the heirs of past workingmen, most of whom are still workingmen.

The cogent points are that, however inequitable may have been the original wage, (*a*) it is not the slightest aid to justice to suggest present interest as a salve for past deficit in wages, because the workingman always loses at the interest-game. He remains a workingman chiefly because he does not know how to play it.

(*b*) There is not the slightest evidence that the present institution of interest or dividends guides its payments even approximately toward those who suffered from any insufficiency of original wage.

(*c*) The task of identifying those who thus suffered in the past, that they may be reimbursed now in the form of interest-payments, is the most hopelessly impossible which the mind can conceive. If interest be really based upon the origin of wealth, then it is the most inequitable institution in the world, for it has wholly failed to keep record of those whom it owes.

(*d*) There is not the slightest evidence that those who enjoy interest in quantity to-day were ever either markedly industrious (productively) or markedly saving in the past. Perhaps a few were so, but as a class the recipients of interest are not emphasized in that direction.

(*e*) Present incomes in the form of interest, and present valuations of principal, are far too large to be explained by any connection with original savings from wages. If thrift in saving from wages had ever been the sole origin of interest-bearing wealth, we should never have had any modern social problem.

For, following Professor Hayes, it may be pointed out that the one obvious feature of *magnitude* of modern incomes upon capital throws into absurdity most of the academic theories as to their equity or nature or origin. Thus, we are reputed to possess at least one billionaire citizen. Millionaires are now so common as to be no longer worthy of notice. Yet what is involved in saving such fortunes from wages, or in exerting any degree of productivity and frugality such that its value to society should justify such fortunes?

A man who actually earned, productively, $20,000 a year, and saved half of it, would certainly be a remarkable man. Yet in order to become a mere millionaire by that process *would require a century of continuous effort! To accumulate a billion would require a thousand centuries!*

Yet the whole history of modern American commercialism is compassed within a century. The bulk of all our millionaires have been created within the last twenty years or so. Preliminary data go to show that a third of them have come into existence within the last year or so!

For all these reasons any explanation of interest by reference to origin has become too great an absurdity for presentation to self-respecting intelligent people. Whatever the capitalist may have done to deserve interest, he must have done it *since he acquired the wealth invested.*

Interest as a Motive Promoting Thrift.—Next comes the argument that if interest were not paid upon savings, no savings against old age would be made.

It does seem as if this doctrine did not need serious refutation, yet it does. It is met most frequently in the mouths of intelligent businessmen. Certainly, if it should become no longer possible to provide against old age by savings plus interest, *there would be all the more anxiety to provide enough savings to do it by the principal alone.*

But more than that, if interest is to be accredited only by its excellence of provision against old age, then certainly, as a mere matter of policy, it defeats itself. For if there be any one particular in which the commercial system fails society in a way more obvious and tragic than elsewhere, it is in its utter failure to provide adequately against old age, in the great majority of industrious, frugal lives! The prime characteristic of the modern commercial system, made up as it is of the policies of the jousting-lists, Donnybrook Fair, the privateers and simon-pure piracy, all developed by modern technique to a degree shaming any one of those good old sports, is that *it* *makes uncertain the title and tenure of every piece of property in the land.*

The prime tragedy of life among the lowly, prevailing an hundred times to once where poverty in old age is the fruit of individual irresponsibility, is the familiar one of the family or person who has lived an unsullied life of toil, thrift and saving, only to find in the end that either no progress can be made against rising prices and the accidents of life, by saving; or else, having saved, to see the whole swept away by our commercial anarchy, just as old age needs it most; or else, barring both of these, to find prices rising against one more rapidly than savings can be accumulated, *even with interest to help.*

Because the commercial system is not only a total failure in its methods of provision against old age, for all except a few, but is actually an obstacle to such provision, this country should long ago have adopted that general policy of insurance against old age by the government which prevails in most other progressive countries. It is just because we are more commercial, and therefore more inconsiderate of the money of the weak and the old, than any other land, that we should have done this first, rather than last.

Our recent provision of a "postal" savings-bank is a late step in the right direction; but it does not go far enough. It still offers interest as an inducement to save. It still leaves untouched the huge interest-bearing "savings" of others, to raise prices against the poor.

Whenever a true science of political economy may become accessible to the people, no one will ever expect to receive in the future, in return for present savings, more than one hundred cents on the dollar. For all will then realize clearly that *to ask any increase, as in the form of interest, must take more out of one's credits, in the form of higher prices collected across the shop-counter, than can be received as interest.*

For, on the average, this increase in retail prices is always equal to the steadily rising volume of interest paid by the nation of Ultimate Consumers, *plus a commercial margin to cover the cost of paying this interest to the Consumer, and then collecting it from him again across the shop-counter.* Interest creates poverty, in the form of rising cost of living, rather than prevents it.

For all these reasons any reliance upon interest as an inducement to saving against old age is the most mistaken of all policies. It is as mistaken as the reliance upon advertising as an inducement to purchase. Just as one may rely best upon the natural, wholesome, unstimulated, unperturbed desire of the Ultimate Consumer to lead him to purchase life-support when he needs it, to the maximum volume pecuniarily possible, so may reliance best be placed upon the natural instinct to provide against old age.

For in each case the instinct is a basic one—a motive force bedded deep in the springs of life, rather than a superficial result needed to be created artificially. All that society needs is a rational means for carrying it out. All which any really honest person should want is the certainty of possessing in the future the dollar which is not spent now. To attempt more is to cheat oneself.

This instinct to provide for future life characterizes all lower forms of life, as well as directs all human history. It drives the insect-world to its heroic strivings to store honey, to weave cocoons or to lay eggs—the last-named task usually ending with the death of the parent. It guides the vegetable-world to accumulate nutriment in seed or bulb or tuber. It leads the animals to starve and freeze themselves that their young may have a fair start in life. It lies back of every school, orphan-asylum and savings-bank. But all these latter would be far more effective than now, if only they were not throttled at every turn by the parasitical presence of commercialism and interest.

Income and Outgo of Interest.—Let us revert to the illustration of the family enjoying a modest income of both wages (or salary) and interest—this time in figures. Take for instance the family normally spending twelve hundred dollars annually. In its every act of purchase of food, clothing, shelter, amusement or transportation it is constantly *making* interest-payments. These, with the incidental contributive costs due to commercialism, amount, if it spends all its income, to anywhere from four to seven hundred dollars annually.*

But this is the usual interest upon a passive investment of about ten thousand dollars! Therefore *no family of this grade is a winner from the institution of interest, even in the direct pecuniary sense, unless it owns interest-bearing securities aggre-*

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* For more accurate figures as to this, see page 336.

gating well above ten thousand dollars in market-valuation, the interest from which it does not spend!

Since life loses from commercialism in many other ways than the directly pecuniary, in lack of security, spaciousness, refinement, etc., the real situation is even worse than this. Yet this degree of capitalism is expected to go with an income from wages or salary of only five to eight hundred dollars, helped out with from four to seven hundred dollars of interest, if it spends the latter—or wages of twelve hundred dollars if it does not spend the interest!

Of course, there are very few families among those pretending to rely upon productive wages for income who possess this degree of invested wealth. *Yet with any less, they lose upon every cent of interest taken in.*

In other words, *the capitalism owned by a family must be at least from twelve to twenty times its annual wages or salary, depending upon the rate of interest which it succeeds in drawing without danger of losing its principal, before that family may even hope to come out even on the game of draw-interest-and-pay-it-back-across-shopcounter. In order to win at that game it must own far more capitalism than this.*

Rising Prices.—But the above is stated merely in terms of the momentary balance between income and outgo. Yet the situation, when the fluctuation of prices is included in the argument, becomes far worse than this. Since capitalism is steadily and rapidly putting up prices, so that a dollar to-day buys far less than a decade, or even a year, ago, the wage-earner loses by depreciation of the purchasing-power of his money with time, before his interest-return comes in, as well as by momentary balance of his ledger. In actual fact, a family possessing only the proportion of capitalism to wages stated above will be slipping backwards, rather than holding its own, *owing to the relatively more rapid progress of the big commercialists in accumulating capitalism!*

Just now the country is being canvassed for Liberty Loans, with strenuous appeal to invest, for the sake of the future, in bonds bearing four per cent. But money invested at this rate, even at compound interest, requires more than eighteen years to double itself. But, if prices more than double in eighteen years, as they are certainly doing now, it is actually more thrifty, under the efficient conditions imposed by the commercial system, to spend the dollar now than it is to try to save it against the future!

For commercialism provides no way for saving it without interest-charges being incurred. It believes—or avers that it believes—that without the interest-charges there would be no inducement to save. Yet it is actually the interest-charges themselves which annul all inducement to save! They actually eat up the value of the principal, by reducing its purchasing-power. *To-day any interest-rate as small as four, or even six, per cent is unquestionably a dead loss to the investor!* Yet if he seeks a higher risk he invites the loss of his principal!

With any rates as small as these, or with proportionate sums of interest-earning principal to wages or salary as small as those stated above, each day sees a measurable loss. To whomsoever places reliance upon petty, passive commercialism as an aid to wages, ultimate poverty is inevitable. This is the real explanation of the present world-wide discontent, which is felt by a class of people far more sober, industrious, skillful and respectable than superficial public opinion takes into account.

It is only the big, skillful commercialists, acquiring high rates upon large sums, through unusual combative powers—and never losing their principal, or winning more often than they lose—who come out ahead at the game of interest-drawing, even in the narrowest pecuniary sense. They win from the petty investors just as surely as the professional gambler wins from the transient player who drifts into his den. In the broader sense of general comfort, prosperity and security in life even the biggest capitalists lose at their own game.

Interest not a Source of Value.—It must already be becoming plain that interest, when viewed from the standpoint of society as a whole, consists merely in taking money out of one pocket and passing it (minus certain losses on the way) into another. Interest represents no natural process of increase in wealth. Money itself has no natural power of growth. The useful appliances which it represents inevitably suffer continual physical depreciation from the first instant of their creation.

Surplus money or credit commands interest only because our surplus stock of materials cannot be made fluid for circulation from man to man, across the open gaps in ownership-in-industry now dividing man from man, without reliance upon this surplus money or credit for effecting transfer. It is only because the

Ultimate Consumer is so involved in his blind faith in the policy of cultivating his income, rather than of conserving his outgo, that he is willing to pay tribute in the form of interest in order to effect a carry across these gaps.

There is no desire to argue here that, to date, he has not been slightly better off, on the average, in paying this tribute rather than in foregoing all privilege of economic intercourse with his fellowmen—a privilege now purchasable only by payments of interest. But the fact is irrelevant. The gains have been due not to interest-payments, but to progress in the technical arts made by salaried or wage-paid men. The economic loss involved in thus deferring this privilege to demands for tribute in the form of interest is an exact parallel with our simultaneous loss of self-respect. Mankind has been either shamefully stupid or shamefully supine, that it has ever let itself get confronted with the alternative of either paying the tribute or going without the transfer.

Indeed, in the chapter upon Credit many instances were given of how these ubiquitous gaps in ownership between commercialist and Consumer, which now everywhere fissure our economic system as crevasses traverse a glacier—and which can be bridged for the life-support of the Ultimate Consumer only by the payment of tribute, in the form of interest, for access to somebody's private capitalism—are obstacles which, rather than being natural and inevitable, *are artificially and deliberately created by commercialism, and industriously widened from day to day, just in order to reap the tribute called interest which thereby becomes inevitable.*

Capitalism is exactly like a man who might dig a ditch across a road, then bridge the ditch, and then collect fancy tolls for the privilege of using the bridge—posing, the while, as a benefactor in having built the bridge.

If able commercialists wish to realize what is meant by this, let them cease their present efforts at organizing stockholders, to raise prices, and undertake the organization of the Ultimate Consumers to bring prices down.

Depreciation.—As stated above, all wealth suffers depreciation from natural causes, from the first instant of its creation. At least, all material capital does so. Capitalism, however, does not; and in this contrast between capital and capitalism lies one of the distinctions most pregnant with significance for the economic trend of the times.

The very existence of an accumulation of material wealth is a burden to the community, through its physical depreciation, unless its presence be justified by either

(1) Its active use by labor in multiplying the rate or ease of current production, or

(2) As an insurance against famine during adverse seasons, or

(3) For extension of facilities.

Even then a certain amount of labor must currently be set aside to make good its natural depreciation. Only when the usefulness of the accumulation exceeds this current depreciation is the existence of the capital profitable to the community, rather than a loss.

Sometimes interest is explained as due the owner of capital in order to make good this depreciation. The answer to this is obvious. *No real interest exists until after the current payments made by the Ultimate Consumer to the capitalist have offset depreciation, and exceeded it.*

If interest were merely an offset to depreciation then the capitalists as a class would be no richer to-day than they were a century ago. The most patent facts of commercial history make it not worth while to pursue this line of inquiry.

Water or Rust?—Take for illustration a bond or stock-certificate issued many years ago, ostensibly to cover the cost of certain appliances needed for extension of facilities. During the life of this paper these appliances have surely depreciated, by rot and wear or tear, to nothingness; or if not that, they have become obsolete and worthless by the progress of events. *Yet neither the face-value nor the market-valuation of the paper in the commercial world has depreciated, for that reason, by one penny.*

The valuation of the paper depends solely upon its ability to extract from the Ultimate Consumer by force the tribute called interest; and that is the same or greater to-day than when the paper was first issued. The Consumer is to-day paying interest upon billions of investments nominally representing appliances (so far as it is yet worth while to keep up the pretense of its representing anything) which long ago fell into rust and dust.

Yet not only is it true that the demands for interest upon these securities have not abated one jot, but *the principal of the debt fastened thereby upon society has not depreciated by a dollar.* So far as the equities or practice of commercialism is concerned, a century hence will find our great-grandchildren still burdened with this same indebtedness to the capitalist as now, or even a greater one, for appliances bought before the Civil War, used up while Hayes was president, and rotted before this present century opened!

During this time the gradual physical depreciation of these appliances has actually been made good out of the payments made by the public for commodities and service; for depreciation is a legitimate, natural charge against the Ultimate Consumer making use of appliances. Therefore all these interest-payments stand as *additional to payments for depreciation.*

Yet they have not been credited to the Consumer on any other account. He still owes the full principal of the debt, and no capitalist will listen to any plan for letting him pay it.

Commercial Authorities upon the Origin of Capitalism.—For further light upon the nature of interest let us turn away from the loose talk of the man-in-the-street to some statements made by prominent commercialists themselves, under oath. Take for instance the testimony of the Illinois Central Railroad before the Interstate Commerce Commission in 1910 (Document 725, 61st Congress, Third Session). The road entered an exhibit showing that its actual cost to date, including betterments and extensions, had been $277,000,000, with which it compared its then capitalization at $285,000,000—the figure on which it had requested permission to earn a "reasonable return," whatever that may be. This cost had been determined by starting with the recorded "cost" of the road when first built, in 1856, of $19,000,000.

We overlook, for the moment, many interesting questions as to just how this paper indebtedness arose, step by step, from the original figure for a few hundred miles of single track to nearly three hundred millions of dollars for a great system of nearly five thousand miles. We overlook the important, but futile, question whether even the original nineteen millions had not already been made much larger than was necessary, with the deliberate purpose of "earning" interest thereon—for the railroads, however they may have been copied elsewhere since then, were the pioneers in high finance.

The sole point at present is that *every foot of that original road of 1856 has become at least once, and most of it twice, completely worn or rotted to nothingness; or become so obsolete as to be worthless! Yet not a dollar's worth of its capitalization has been canceled!*

This is so by the repeated testimony of the road's own officers, arguing the vast sums which have had to be expended for upkeep and betterment. They forget that the only conclusion enforced by these facts is that every penny of this original indebtedness of nineteen millions, and much of the additional $258,000,000, ought, in the most ordinary equity to the public, to have been canceled long ago by sinking-fund, and not refunded, so that it no longer formed any part of the community's economic burden in 1910.

Yet this case of the Illinois Central is in no wise an extreme or unusual one. It was not challenged by the Interstate Commerce Commissioners as such. It merely illustrates well (by a case so favorable to the railroads as to be selected by themselves from among many, for representing them all before the Commission) the normal procedure of the financial world and the public's acceptance of it as "business."

It might be said here that this and further quotations from testimony by the railroads are not adduced because the railroads are in any wise exceptional offenders, but merely because their public character forces into the limelight statements concerning them which bear upon the true nature of commercialism, from authorities high in that field, such as are not to be had in any other business. There is scarcely a corner-grocery in the land, not to mention the common run of corporations, which is not following exactly this same financial policy as the railroads; but their smaller size and greater number permit them to "get away with the goods," where the railway-companies are caught and held up to public execration. But it is the prime object of this work, however it may be forced to cull from the railroads the facts which it condemns, to unmask this pose of innocence on the part of the multitude of petty commercial sinners, and to show that they are just as guilty in degree, and cumulatively far more so in volume, than are the railroads.

All this bears directly upon the common allegation that interest is justified provided it be paid upon moneys which have been actually expended for appliances; or in other words that, provided the stock has not been "watered," dividends upon it are equitable. Without stopping here to debate this question in full, it must be clear that *if the existence of these appliances is what justifies interest, then their disappearance must remove that justification.* However honest an investment may have been originally, twenty years later its physical embodiment is sure to be pure water or dust. As the appliances rot, wear out or become obsolete, the interest-payments upon them, in equity, should gradually cease.

But this never occurs. The commercial world to-day cares not one hurrah, in reality, whether its interest-bearing paper represents actual appliances or not. The sole question attaching to it is: Can it be made to draw interest or pay dividends?

Interest as a Fruit of Unproductivity.—Another contention in favor of the justice of interest to which preliminary attention may be given here—and this is the only contention which appears to offer even a ghost of reasonableness—is that interest is incurred by reason of loans or requisitions made for the purpose of creating some extension of facilities which cannot be expected to be productive for some time in the future.

It has already been pointed out, in effect, that the natural, or factory-system, method of making requisitions for the extension of facilities, without asking interest thereon, depends not at all upon any idea that the new facilities must immediately become productive. The factory's stockroom stands there for the express purpose of tiding over this interregnum period until the new shall have become productive, be it short or long.

But however this may be, certain it is that, in either equity or common sense, an interest-bearing debt which has been incurred for the purpose of tiding over this unproductive period, with its interest explained as being due to this unproductivity, *must cease to bear interest, and must cease to be a debt, as soon as the enterprise has become productive.* In equity, the first destination of any profits must be to cancel all outstanding interest-bearing indebtedness.

Any failure of those in control to provide for this enforces immediately the conclusion that the indebtedness was incurred, in actuality, not for the sake of the new facilities, nor the interest paid because those facilities were not immediately productive—which statements serve merely as an insincere excuse—*but solely for the sake of exacting continuous tribute, called interest.*

Now all of the broad, patent facts of the commercial world drive one irresistibly to the acceptance of this latter alternative. It is plainly not the new and unproductive enterprises which pay all, nor even any appreciable part, of the aggregate interest paid. *The bulk of all interest-payments come from those enterprises which are the most intensely productive, and which have been so for the longest time!* There is not even a ghost of a pretense among the commercialists themselves, although there is among our university-puppets, that things are otherwise.

It is everywhere obvious, to those having the slightest desire to observe the truth, that it is just those concerns which have unquestionably been most profitable for decades or generations, whose securities "earn" the highest rates of interest or dividends, which are constantly refunding those securities in largest volume, and whose capitalization is increasing most surely, rather than decreasing most rapidly, because of their high rates of productivity.

Indeed, new enterprises are habitually launched with the most emphatic promises that soon *large profits will permit large payments of dividends!* But, if all this be so, then dividends certainly cannot rest upon temporary unproductivity as their excuse.

Opportunity for Investment.—The unremitting pressure of the entire financial world, the publicly avowed demands of the railway-corporations before our Interstate Commerce Commission, the ceaseless activity of every inventor having also the commercial instinct, the unquestioned methods of every broker, promoter or agent, and the continual intrusion of new business-enterprises into districts already fully served—all these prominent and indubitable characteristics of the commercial world stand as evidence of its utter indifference to the interests of the Ultimate Consumer, as its guiding force, and of its insatiable appetite for this tribute called interest or dividends—an appetite which limits itself by no law nor reason whatever, except the sheer inability of the Ultimate Consumer to pay further tribute.

These facts concerning commercialism all record a continuous, deliberate, energetic and reckless expansion, rather than any rational, judicious or wholesome retraction, of this volume of interest-bearing burden upon the Ultimate Consumer, to confine it to those enterprises and periods during which unproductivity is unavoidable. New securities are constantly being issued; but none, in effect, are ever retired. *Those which mature are always refunded, either directly or indirectly, in ever greater and greater volume.*

In not one atom of all this is there solid basis for any sincere argument that the debt is created merely to tide over the unproductive period—and hence is to be canceled forever out of the first earnings. Instead, the larger those earnings may become the higher is the rate of interest paid, or the greater is the expansion of the securities in volume. *There has been from the start no other aim in mind than this!*

Indeed, the sole limitation upon the issue of ever larger volumes of such securities, for the sake of increasing the burden of tribute exacted from the Ultimate Consumer, is avowedly *the sheer ability of the public to pay the interest or dividends thereon,* in the form of prices collected across the retail-shop-counter. As soon as this ability has been demonstrated, in connection with any particular set of securities, these are said to have been "absorbed." If the public shows signs of inability to pay the tribute, then warning is recognized therein that the traffic (of issuing securities) has been "charged all it will bear."

Water or Dust.—Whether or not these securities may have been originally issued against any real expenditure for useful appliances—which will all have become a matter of indifference twenty or thirty years from the date of issue—*their market-value has become, through the fact of "absorption," equal to their face-value.* Whether created from sheer water in the first place, or from that which will soon become dust, they have thereby become real and usually permanent *money*—exchangeable for gold. Their lien upon the people's wealth is measured in dollars each one of which derives its value from some man's toil or some woman's tears.

All that they are has come not at all from within themselves, but wholly by addition from without, through the energy and sacrifice of the public of Ultimate Consumers. Their own foundation rests upon no permanent actuality of purchased appliance, but upon a *mere gap in continuity of ownership* where none should exist—a mere "fault," as the geologists would say, in our economic organization. From the moment of their absorption forward, for a time interminable by any statute or equity now recognized by either the commercial world, the courts, the universities or our federal Constitution, both the securities and the interest thereon stand as a sheer hold-up of the community—a privately assessed tax, enacted without the consent or knowledge of those assessed, and collected under duress from every Consumer in the land—a diluent of the purchasing-power of every dollar which crosses a shop-counter anywhere in the commercial world, without regard either to political boundaries, to commercial unities or to human equities.

Economic Hypnosis.—Yet it is a tax which is not paid willingly nor spontaneously by the Ultimate Consumer. It can be extracted from the unwilling victim only after he has been drugged into subconsciousness, or into grudging acquiescence, by a most indirect and disguised method of collection. It is accomplished only through a systematic hypnosis of the public through brilliant shop-display, clever advertisements, professionally trained salesmen, concealed ledgers and utterly rotten text-books in political economy.

It requires the united, continuous and strenuous efforts of the entire commercial world to maintain in halting operation, against the real interests of the Ultimate Consumer, such a sheer "frame-up" as that—a systematic deception of the entire people, as to what they are getting for their money, which is, in effect, just as fraudulent, just as unstable, and ultimately destined to be just as volcanic under civilization, as was ever the "kultur" propaganda of Prussian militarism.

For modern fraud does not lie in the crass adulteration of the physical thing sold, which is too clumsy a swindle to figure largely to-day. It lies, instead, in the constantly increasing adulteration of the purchasing-power of the Consumer's dollar, and a continual deception of the people by a false propaganda in political economy as to this fact. How the professors of political economy, to whom we are entrusting our youth for guidance through the intricate and menacing problems of the near future, dare to teach such insincere rot, unsupported as it is by any slightest fact concerning commercialism, it is impossible to comprehend. It might be expected that even these irresponsible, though official, apologists for the hollow fraud called "business" would realize that they are thereby inevitably losing the world's last vestige of faith in their intelligence and sincerity.

Economic Equilibrium.—By the path outlined above we have now reached the proper point for inquiry as to how may be determined both the volume and the interest-rate of those profitable debts which are constantly being foisted upon the people by the commercialists. In this we have now for the first time come into contact with a principle of economic equilibrium so wide and so basic that its influence extends far beyond any mere question of interest and dividends.

This principle permeates every cell of our intricate body economic, determining all manner of questions as to volumes, rates, prices, qualities and relative proportions prevailing in our everyday world of statistics and activities. More than that, it is a local manifestation, in economic phenomena, of one of the greatest of those natural principles of cosmic equilibrium—the laws of gravitation and of fluid equilibrium—in the hands of which not merely solar systems and kings, but even world-democracies, are but puppets.

So basic and dominant is our control by this principle of economic equilibrium, in all which is to be debated hereinafter, that a digression must be made here in order to establish well its understanding. A chapter will be devoted to it exclusively. After that a return will be made to the unfinished topic of interest and dividends.

CHAPTER XI

ECONOMIC EQUILIBRIUM, OR "CHARGING ALL THE TRAFFIC WILL BEAR"

In the productive field of industry, which we have called herein the national factory-system, any effort exerted by the producer is beneficial both to the Ultimate Consumer and to himself. The harder or more skillfully the producer works, and the more he earns as just wages in equivalent for what he produces, the richer is the Consumer as well as himself. For both draw their increased welfare from a source, namely, the life-producing interaction between production and consumption, to the fruitfulness of which, working in an unending cycle, no natural limit has yet become visible.

But in the commercial field of the market-system, on the other hand, the greater the effort of the commercialist, or the larger his income, whether derived through active combat or through passive ownership, the poorer is the Ultimate Consumer. This, as has already been explained, is baldly due to the fact that the commercialist's efforts are non-productive; wherefore his income can consist only of an abstraction from the welfare of the Consumer.

But under what conditions does this occur? Is this abstraction performed without penalty to the commercialist himself, aside from its hardship for the Ultimate Consumer? Is it limitless? If not, wherein does the process find its natural limit?

Is this limit found in some stability of equilibrium, tending always to hold the process within some definable, if elastic, degree? Or is this process of robbing the Consumer quite arbitrary, irresponsible, spasmodic and indeterminate?

The answer is that commercial combat, being a natural phenomenon, acts always in stable equilibrium, as do all physical phenomena. However unnatural it may be in the sense of being dissipative of human effort, and therefore undesirable for human life and growth, yet it must function within the same laws of equilibrium with all other physically dissipative and humanly undesirable phenomena. Therefore it tends to gravitate in a certain direction which is definable, toward a limit which is definable.

This limit appears in a stable balance between two opposed forces. One of these forces is the tendency of the dealer, natural under the influence of profits, to raise prices. The opposing force appears in the Consumer's refusal to accept the higher price.

But this refusal, it is particularly to be noted, does not lie in his conscious, rational revolt against the higher price, acting in any way effective to remedy the situation. For a Consumer's rejection of a higher price means merely his going further to accept the same price, after he has become used to the idea, or to come back and accept it from the same dealer after he has gotten over his indignation—all of which is childishly ineffective. The only effective bar to rising prices (while commercialism holds sway) *lies in the Consumer's subconscious, physical inability to continue his purchases in undiminished volume, as the price rises.*

An Illustration.—For instance, imagine a community having $1000 a month to spend for flour. Imagine that a complete, national factory-system could supply this flour to the Ultimate Consumer, including the natural cost of retail distribution, at the price of $10 per barrel. Then 100 barrels per month would be consumed. This is the natural, 100-per-cent situation, exhibiting the community's normal volume of production and consumption.

But imagine now that the community is careless enough to let some group of commercialists append to the community's factory-system their costly, competitive, duplicative, profit-seeking system, making the price of flour, say, $11.11. Then only ninety barrels per month, at most, can be sold. These cost the commercialist who handles them only $900. He sells them for $1000, and "makes" $100 of gross profits.

It is particularly to be noted, at this point, that it makes no slightest difference to the line of analysis which we are pursuing here, nor to the welfare of the community, whether this $100 be all net profit, going into the commercialist's pocket, to enrich him "too fast," or whether some part of it is paid to underlings in wages, or whether it is all lost in "costs of doing business," so that the commercialist makes nothing, and may eventually become bankrupt. The sole point of importance to the community is that some sort of unnecessary commercial cost has been added to the natural factory-system cost, thus diminishing the volume of consumption.

If now the commercialist raises his price to $12.50 per barrel, then only eighty barrels per month, at most, can be sold and eaten. Yet on this smaller amount of goods his aggregate profits will be the difference between $800 and $1000, or $200—twice that before. *His income has risen as, and actually because, the supply of nutriment to the community has fallen!*

Consequently and most naturally, he will continue to raise his price. The resultant diminution of nutriment to the community will act as no deterrent whatever to this process. Not only is that not his "business," which is to make profits—the community has told him so—but he cannot return the volume of consumption to normal without foregoing all profits; and if he does that he must go out of business altogether. Then the community (failing in sense enough to organize and maintain its own factory-system) will have no nutriment at all!

But we are bound to accept in our premises a community of Ultimate Consumers too lax to control that industrial system every conceivable cost of which it already pays, across shop-counter. It is too lax even to stop and think what forces it sets going when it tells every man to buy anything he can, at as low a price as he can, and then to rely, for his income, upon reselling it at a higher price.

Hence the only conceivable stop to this process of raising prices is the point, ultimately sure to be reached, where *further rise in price diminishes gross profits.* At that point, and not before, the commercialist will stop raising prices—but with the community already starved far below its natural supply of flour.

Competition no Corrective.—Nor is commercial competition, the factor so widely worshiped, in popular economic superstitions, as the stimulant of trade and the reliable bar to undue elevation of price, any obstacle whatever to progress "too far" in this policy of depressing the volume of trade by raising the price. Competition, it is true, ensures that *no one commercialist may raise his prices appreciably faster than any other;* but it constitutes a most powerful incentive to all commercialists to raise their prices simultaneously, and thereby to reduce the volume of trade still further below normal.

Indeed, competition will be found, upon investigation, to be, in reality, an irresistible compellant to raise prices. This is so because the keen spur of competition drives every dealer to seek, before all other things, a larger *fraction,* relatively to his competitors, of whatever volume of trade may be available; and to do this he must expand all his costs of doing business—his advertising, drumming, illumination, etc.

Irrelevance of Whether Profits be Gross or Net.—But all of this merely exaggerates the margin of price asked above natural cost; and in the depression of trade by high prices it is not at all the nature of this margin, nor its destination, but its sheer *magnitude,* which alone determines the sag of trade below its normal volume. Whether the dealer himself enjoys this margin between natural cost and price asked, in the form of net profits, or whether it be all eaten up in cost of doing business, makes no difference whatever as to the decrease in the volume of goods which the Consumer can buy at the supernatural price.

Since these costs of doing business can be reduced only by the elimination of all competition, and the return to the pure factory-system of supply, competition will be found to be the worst possible aggravant of high prices. This, briefly speaking, is the recent economic history of our country. The allurements of higher commercial incomes have drawn people steadily away from productive tasks into commercialism. Their entrance there has enhanced competition. Keener competition has forced the multiplication of costs of doing business, until now almost any sums are spent in order to secure trade. These growing costs of doing business have forced prices up while, and in spite of the fact that, true costs of production, through the increasing efficiency of our machinery, have been falling.

An Economic Misapprehension.—In the long run, net profits are not determined by subtracting from a fixed margin these increasing costs of doing business. Instead, the net profits not only remain unchanged, but may even increase, while the costs of doing business also increase. The explanation lies in the elasticity of the margin—in the higher price paid by the Ultimate Consumer, which is the sum of these two factors, both of them ever increasing.

Indeed, it is one of the chief lessons of this book that it is not the increasing wealth of the few, however wrong that may be, which is the most insidious poison in our economic system. It is, instead, this rapidly increasing burden upon the Ultimate Consumer of these uncontrollably expanding costs of doing business, which benefit no one.

For the net profits, if too large, are easily seen, and might conceivably be returned to the Consumer by forcible abstraction. This, indeed, is the idea underlying all modern discontent voicing itself either as socialism or in the form of income-tax. But the wastes of commercial competition, on the other hand, which are by far the larger factor in making people poor, are hopelessly lost forever. Once they have been incurred, no human effort can regain them. Once admit the sacred right of every man to buy anything he chooses, reselling at a concealed margin, and no power on earth can prevent these costs from expanding indefinitely.

Character of Forces at Work.—Before attempting any mathematical computation of the price and volume of trade at which the commercialist's return becomes a maximum, let us debate further the nature of that balance of forces which is at play within every negotiative bargain; for there is scarcely any problem in economics wherein the psychology—or rather, the lack of psychology—is more commonly misunderstood than this.

For the basic fact underlying all determination of prices is that the point at which the income of the commercialist is no longer increased by a further increase in price—which is the point for which every commercialist is instinctively groping, with greater or less acumen, as he selects his prices—is one determined *statistically and intellectually,* and not at all psychologically or morally.

Indeed, there occurs no balance of psychological forces whatever. The problem demands of the seller merely accuracy of record, to determine at what price he is making the most money, and not at all any conscience or altruism of heart. He is just as willing to lower prices as to raise them—he will doubtless prefer to do so—*if only he can thereby increase his profits.*

The whole picture so popular with the demagogic editors and others—of a seller or "profiteer" impelled by unnatural, reprehensible greed to raise prices, out of sheer malice—which depraved tendency is to be counteracted, of course, by appeals to his conscience, or to his fear of the law—is as baseless in fact, as childish a creation of the imagination, as futile in its explanation of the situation, and as mischievous in its effect upon public stability as were the griffins of ancient mythology, or the witches of medieval superstition. The play of contending forces is quite otherwise than this, and neither conscience nor the law can exert any slightest control over it.

The Premises for High Prices.—The stage has been set, in the first place, by the hundred million Ultimate Consumers themselves, and not at all by the seller. For the former uphold at all times the commercial system, which offers its rewards in the shape of profits. Virtually all Consumers believe that the seller should own what he sells, although no producer is allowed to own what he produces. That belief once fixed, all which is described below follows inevitably.

Thus the Ultimate Consumer first issues to the seller a bald invitation to raise prices. He does this, first and forcibly, by his advocacy of the profit-making, ownership-in-industry system.

He does this also by his sheeplike response to silly advertisements, alluring lights, plausible statements of subsidized salesmen, etc., as if these were sane determinants of where and what to buy, worthy of an intelligent person's attention.

He does this also by his complete failure to combine with his fellow Ultimate Consumers, for united action in the assertion of their sovereignty over their own spending-money.

He does this most of all by his blind and stubborn insistence upon working day and night to earn a greater *income,* while steadfastly refusing to devote similar time or effort to the equally important task of controlling efficiently the *outgo* thereof.

In the face of this situation, created by the superior if subconscious power of the Ultimate Consumer, the seller acts merely rationally and naturally. *He raises prices merely because he has been hired to raise prices.* For pay assigned in the form of secret profits going to an owning seller, as contrasted with known salary or wages assigned to a non-owning producer, amounts to exactly that.

It is also true, and only natural, that the owning seller will raise prices no higher than he is hired to raise them; because it finally appears that the raising of prices, which at first increased his profits, ultimately no longer does this. Indeed, any further raise decreases them.

The Commercialist's Goal.—Therefore the owning seller's prime question is: How high does the community hire me to raise prices. This question he can answer for himself only by tentatively and gropingly charging "all the traffic will bear."

That is to say, the seller's choice is merely between prices so high that he loses, and prices so low—although still far above the natural price—that he also loses (relatively to his maximum possible profits). He has no choice except to avoid, as best his blind gropings may permit, both of these extremes.

But the modern economic problem lies concentrated within the fact that when he has found, if he can, the golden mean where profits are a maximum, *it is already sure* (*as settled in advance by the Consumers' mistaken policy*) *to be one which restricts the volume of trade far below normal, through a price far above the actual one.*

Computation of the Maximum Profits the Traffic will Bear.—If what has been said above be true—that the point of maximum profits is determined by rational, rather than by psychological, considerations, then it must be possible to compute this point of balance. This is true. This point of economic equilibrium is determined solely by factors as cold-blooded and mathematical as is the law of gravitation. It is almost as accurately computable, and in equal neglect of sentiment or morals, as is the height of next year's tide.

Community-Nutrition.—There is only one factor in the computation regarding which, as yet, there is any uncertainty, and this one is neither a psychological nor an important factor. It has no bearing upon sentiment or morals, and pays no slightest regard to human legislation. This uncertain factor is: According to what mathematical law is the *energy* of the community reduced, as its *volume of nutriment* released to it by the commercial world decreases, due to rising profits and costs of doing business?

It is true that we do not know this law with mathematical exactness; but it can be reduced within certain mathematical limits. Thus, in the first place, there can be no doubt that it is a *direct* function—that is to say, that *the community's energy, and hence its purchasing-power, decreases directly with its degree of nutrition.*

An Illustration.—What is meant by this is that our illustrative community, for instance, which had, under the natural factory-system, $1000 per month to be spent for flour, *does not fully retain that purchasing-power* when the supply of flour has been cut down, by the costs of commercial competition, to ninety or eighty barrels, say, instead of one hundred. The average citizen is not so well fed, and therefore not so energetic nor ambitious in productive enterprise, as before.

In consequence of this biological law, as soon as the price of flour has been raised above $10 the total flour consumed is reduced not merely in inverse proportion with the price, as computed above, while the aggregate purchasing-power of $1000 per month remains unchanged, *but more. The available sum, originally $1000, decreases while the price per barrel increases.* Hence the number of barrels consumed is doubly reduced.

But whether this variation of the result (purchasing-power) occurs more or less rapidly than its cause (community-nutrition) is not now known. It probably varies less rapidly. But, however this may be, the mathematical limits within which it must probably fall are easily stated.

The Range of Possibility.—That is to say, while an even proportionality between these two variables may be taken, for the moment, as the most probable truth, yet departure from this assumption, on one side or the other, could hardly conceivably exceed proportionality with the *square* of the price, in the one direction, nor, in the other direction, with the *square root* of the price. For all practical purposes—particularly in view of the mathematical results cited below—it is safe to assume that such a range as this includes every possible variation.

For it will soon appear that a trespass even beyond these limits would make no appreciable difference in our mathematical conclusions as to price and volume of trade at which the seller's income becomes a maximum. The effect, in this case, varies far less rapidly than the cause.

The Mathematical Law of Charging All the Traffic will Bear.—Thus there are three assumptions upon which it is proper to enter a mathematical investigation of this process of "charging all the traffic will bear," namely:

1. That community-nutrition varies *inversely, but proportionately,* with the price of commodities;

2. That it varies *inversely as the square* thereof; and

3. That it varies *inversely as the square root* thereof.

The mathematical solution of the problem as to where will be found the point of maximum commercial returns—where the traffic has actually been charged all it will bear—under each of these three assumptions respectively, will be found in Note 1, at the end of this book. Here the reader is burdened only with the results of the computation, stated comparatively. Thus:

I. Assuming that the purchasing-power varies *exactly* as the nutrition (which itself will vary inversely with the retail price), then *gross profits or diluits become a maximum when the selling-price is just twice the natural cost, or at a rate of gross profit of just 100 per cent.*

Under that condition the aggregate purchasing-power of the community (expressed in dollars) will have fallen to just *one-half of normal,* and the average volume of production and consumption per capita, expressed in commodities, will have fallen to just *one-quarter of the biological, factory-system normal!*

II. Assuming that the purchasing-power varies as the *square* of the nutrition, then *aggregate profits become a maximum when the selling-price has risen only to 50 per cent above the natural cost.*

The aggregate purchasing-power of the community, in money, has then fallen to *44 per cent of normal,* and the average volume of production and consumption per capita to *29.6 per cent of the factory-system normal!*

III. Assuming that the purchasing-power varies as the *square root* of the nutrition—and this is the one case, among the three, which is best supported in probable truth by general biological facts—then *profits become a maximum when the selling-price has risen to 200 per cent above the natural cost!*

The aggregate purchasing-power, in money, has then fallen to *57.7 per cent of normal,* and the average volume of commodities produced and consumed per capita *has sagged to 19.2 per cent of the factory-system normal!*

Thus, wherever within the bounds of probability may lie the exact relationship between community-nutriment and purchasing-power, the inevitable result of our appending to the factory-system, as at present, the unnecessary, costly and parasitical commercial system—as if it were the only system imaginable for financing extensions and conducting sales—must be in any case *a marked depression of the volume of trade,* with its resultant oppression and starvation of the Ultimate Consumer, and its partial paralysis of employment for the producer. This has now become true to a degree which would be unbelievable, were it not supported both by general observation and by the above mathematical analysis. The general fact is obvious; but its degree would not be guessed, without mathematical proof.

Wherever, mathematically speaking, may lie this obviously direct relation between community-nutrition, on the one hand, and society's purchasing-power as its result, we have no escape from the conclusion that its catalytic presence forces commercialism, wherever in our body economic its germs may be at work, to enact, by their exuded poisons, *a deficit in our natural activity in production, interchange, consumption and real employment, on the average per capita, by some major fraction, ranging from probably not less than seventy to not over eighty-one per cent, of what would naturally prevail were there no commercialism in the land—were there only factory-system everywhere.*

The reader who finds these figures hard to believe, from a bare mathematical proof, whereas he may not be mathematical by nature, must postpone his judgment until later chapters, dealing with Unemployment, etc., more in detail, have been read.

Trade Everywhere Paralyzed by Commercialism.—This statement is a sweeping and positive one. This current deficit of from seventy to eighty-one per cent in our natural volume of trade is due merely to an artificial increase in all prices everywhere, caused merely by our neglect of organization where organization should exist. It depends not in any slightest degree upon whether any given commercialist is getting rich too fast, or too far, or is getting rich at all; nor upon whether he is hiring and "exploiting" labor or not. It depends solely upon *what he is doing in his attempts to get rich, or to avoid bankruptcy.*

It depends solely upon the fact that the hundred million Ultimate Consumers permit upon their premises, in the national Factory-System which they alone support, and over which they are in equity sole Sovereign, a sort of activity and a legalized institution, namely, *ownership-in-industry,* which every actual capitalist-employer or superintendent of labor in the land now excludes rigidly, in the interests of efficiency, from the particular premises over which he happens to exercise authority.

Competition the Death of Trade.—This, then, is the scientific aspect of that ancient and honorable superstition, begotten by the man-in-the-street and fostered by the universities, that "competition is the life of trade." The truth of the matter is that competition—using that term to cover all brands of commercialism, of which competition is only one—comes just as near to being the death of all trade as possible, while still leaving in it a spark of life upon which to "sponge." The natural productive and consumptive life of the nation bears up under this parasitical burden of commercialism exactly as a slave lives under an idle master—starved in body, mind and morals to the utmost degree *which will still leave life enough to produce something upon which the master can subsist.*

Economic Abdication Impossible.—The Ultimate Consumer has had thrust into his unwilling hands, by fate, the sovereignty over this entire field of action. If he is unwilling to exercise this sovereignty consciously and intelligently, to guide trade toward his own best interests, he cannot, nevertheless, abdicate his responsibility in fact. His innate sovereignty, forbidden rational expression, insists upon working its sway subconsciously, blindly, irrationally and destructively, just the same—like a locomotive run wild without a driver—acting automatically to raise prices to the highest, and sagging the volume of purchase and consumption to the lowest, point which will still leave the seller's profits a maximum.

The law operates automatically and relentlessly. Assuming refusal of the Ultimate Consumers to control it in the only natural way inherent with them, in their function as retail-purchasers, it is subject to no control by law. The political function of the voter is no substitute for his economic function and responsibility as an Ultimate Consumer.

Thus the Consumer has acted on the wrong plan from the start. Then, when he finds that it hurts, he grumbles or riots, equally ineffectively. The last thing he will consider is a combination of all Ultimate Consumers for rational, efficient action.

Finally, when further purchase becomes financially impossible, he ceases buying, either individually or through boycott—a policy which arrests rising prices *only at a time when the arrested price can no longer benefit the Consumer, and which starts the rise into action again the instant the Consumer resumes buying.*

Social Factors Determined for us Automatically, by Economic Equilibrium.—There are many features of modern life besides the price and volume of retail food-supplies which are determined for us by this same relentless, subconscious operation of non-sentimental forces, acting in stable equilibrium. Any list of the more prominent sorts of thing thus controlled for us must begin with those just mentioned, because these are the most vital ones. That is to say, first come all questions of *price,* whether for raw material, partially manufactured goods, jobber's wholesale or Ultimate Consumer's retail. Next comes the only factor equally basic with price, and determined simultaneously with it, namely, *volume of trade* at each of these many points.

Next follows, in parallel with this last, and of gigantic importance, *the current volume or rate of issue of interest-bearing securities,* or the rate of interest thereon. All this must be absorbed currently by the public, else society can enjoy no circulating-medium with which to keep its big enterprises in motion—just as it has to swallow currently the rising volume of profits and costs of doing business, else it can get no daily bread.

Included as a part of this third sort must also be that rising aggregate of *valuation* of all sorts of appliances, buildings and stocks of goods against which no formal securities are commonly written. The growing valuation of a grocery-store, for instance, or of an apartment-house the orginal cost of which has undergone no change, are illustrations of this. Indeed, according to Professor Fisher's law, quoted later, this increased valuation is a direct result of, and is proportional to, this increased income in the form of rising retail prices or rentals.[1]

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[1] This is how this works, as described by Justice Harry Robitzek, a New York City judge who has dealt largely with the tenement-eviction and ''rent-strike'' cases in that city, as reported in the *Times* for December 3, 1919:

> ''The trouble comes from two kinds of operators—the speculator and the lessee. The speculator has a house under consideration and finds that the gross yearly rental is $10,000. He figures that the

Quite in parallel with these more elementary and simple factors of economic life, such as prices and volume of trade, yet bearing as directly upon our daily happiness, are others which are dependent upon these first. At least, they are determined by this same process of balance in stable equilibrium. Among such may be mentioned the congestion of population in cities, or in certain occupations; the depopulation of the rural districts; the current volume of unemployment; the unsatisfactory grades of taste which prevail in many fields of work, art or recreation, which we commonly, but erroneously, attribute to depravity in public taste. None of these are matters of conscious, willful, social control. Each is a product of subconscious, automatic, economic equilibrium—not uncontrollable, but controllable only through a technique which we have not yet learned.

Even the volume of crime, in its broad proportion to more wholesome activities, is determined in this same way. Burglary proceeds merely so far as it pays. The dirt in our streets, the poor quality of cooking and worse atmosphere of service in our restaurants, the poor music played in our public places (selected because it is supposedly popular, when the cogent fact is merely that the lovers of good music have been disfranchised by commercialism), the prevalence of the vulgar tip-system (which everyone dislikes and which every social club prohibits, because in a social club the preference of the members rules)—all these are instances of our government not by individual preferences, but by the unsentimental dictates of a relentless, uncontrollable institution, which we ourselves have erected and started into motion, but which we cannot control nor stop.

> value [valuation] is about six and one-half times that, or $65,000. He buys the house for that figure and immediately raises the rents $1000 a year. The next man comes along and multiplies $11,000 by six and one-half and pays the first man $71,500 for the house, and raises the rents another $1000 a year, so that he may pass the house along to still another speculator.''

This process looks like bald robbery, when stated in this way; but it is exactly the same process, only less disguised, which has been raising the valuations of every sort of unchanging property during the last few decades. New property takes its increasing valuations partly from increasing costs; but old, unchanging, *physically depreciating* property acquires its rising valuations only through this bald process of charging all the traffic will bear.

We cannot digress here from our topic—economics—to prove these statements as to esthetic phenomena. But neither can we pass by the topic of automatic social equilibrium without at least their bare mention. The connection between all these diverse social phenomena and the simple balance between price or volume of trade and dealer's margin is not an obvious one, nor is there space here for tracing it in detail. An illustration or two must suffice.

Service versus Profits.—The income of a commercialist, whatever may be its character in detail, consists always of a margin between the natural cost of something useful to the Consumer and the price exacted for it. In order that this margin may be secured, the first requisite is some degree of service to the Consumer, else the latter will not pay either the natural cost or the margin above it.

Yet, it must be noted most carefully, *it is not this service to the Consumer which brings the commercialist his income, and therefore keeps him at his post. It is the receipt of the useless and burdensome margin above the natural cost which alone does this.*

Thus, on the one hand, a grocer selling food must actually aid in forwarding nutriment toward the Consumer, else the Consumer will not continue to buy. The president of a railway-corporation must permit his salaried superintendents to serve the public with some actual transportation, else the public will cancel the road's franchise or charter. The promoter issuing interest-bearing securities must supply in them some degree of fluid credit as a circulating-medium (which is the sole function of these papers which is actually useful to the community), else the community will soon become unable to "absorb" them by paying interest upon them.

Yet it is equally plain, on the other hand—and it is even more important to note—that the grocer who merely supplied nutriment to the community, yet made no commercial profit (beyond his proper wages as a producer), or who diverted none of the Consumer's money into costs of competition with the dozen other grocers who are duplicating his efforts, must soon go out of business. He could not secure his fraction of the job of feeding the community; and *if all grocers followed this policy the community, if bound to the commercial system, would go entirely unfed.*

Similarly, the railway-president who gave the community such good service that no dividends were paid to the stockholders would soon be discharged; or, if not, his bankrupt corporation would soon be bought up for a song by other commercialists, who appreciated better its possibilities as an extractor of tribute from the public. Likewise the promoter who might accomplish merely an expansion of the volume of circulating-medium—which is the sole useful function attached to his profession—yet without bringing dividends to the capitalist, would soon cease to promote.

For in all commercial fields of activity, *the making of commercial gains is always the primary qualification for tenure of office. Service to the public, even if usually inseparable from this, is nevertheless a consideration quite secondary in importance*—unable of itself to maintain commercial existence and authority, if the primary consideration (profits) be lacking. Indeed, there are many instances where the last vestige of usefulness to the Ultimate Consumer has departed from the commercial office held; yet the income attached thereto continues and expands, merely because of the incumbent's ability to connect said office with some remote act of consumption by the public, and to increase the practicable degree of extortion thereby attached to it.[2]

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[2] The telephone-situation in New York City during the winter of 1919-20 is an instance of this divorce of service and commercialism. The telephone-service, after the war, gradually became unspeakably bad. On several minor instances the officials of the telephone-company were quoted as admitting this fact, and by February 11 Vice-President McCulloh, of the New York Telephone Company, permitted himself to be quoted in over a column of the *Times* to this same effect.

The explanation of all this bad service, both in the public admissions referred to and in private correspondence between the author and the Company, is inability to secure either plant or help, or both. But, it is particularly to be noted, this difficulty applies equally to all departments of the Company's work. Yet neither the public nor the author has ever found the slightest cause for complaint in the inefficiency of its *commercial department. The efficiency of its book-keeping and billing offices has been uniformly one hundred per cent!*

The service itself has been so bad that, should the Company omit altogether to send out bills for one month out of the twelve, it would still be indebted to the public for unearned income. If it should divert its every book-keeper and collector into the operating department, it could not make the service what it should be. Yet it has not so

These facts constitute merely another form of stating what was proven mathematically above, namely, that the effect of commercialism is to annul the major portion of the service otherwise potential within the community. These facts are inserted here with emphatic address to those readers who share the widely prevalent view that sellers make their maximum income when they best serve the Consumer. The economic problem which now confronts us cannot be understood in its most trivial detail until the student grasps the fact that *every commercialist gets his biggest return when he has deliberately driven away some three-fourths of his potential volume of trade.*

Moreover, when inquiry is directed toward the question which three-quarters is it which is automatically selected for rejection, and which one-quarter retained, in this operation of the survival of the most profitable, it develops that *the one-quarter retained is always that which consents to accept the cheapest, most tawdry and vulgar grades of goods or service.* For it is upon low cost, as much as upon high price, that the commercialist makes his profit. He rejects not merely the major volume, but also all the better qualities, of demand, as being unprofitable. We see the working of this law in every pore of our social life, from our literature of "best sellers" to our cattle-trains loaded with strap-hangers and Coney Island standards of entertainment.

The fact that, in spite of this law, so many dealers do still actually preserve some interest in serving their customers is one of the many instances, cited all through this book, of how the innate tendencies of our wonderfully wholesome human nature do succeed in defying the degrading influences of an artificial institution, such as commercialism. But that fact should not blur in the slightest the more dominant fact that the institution of profits, as arranged by the Consumer himself, hires the seller, so far as it has power, to have as little interest in serving the Consumer as the Consumer is physically able to stand, and as the seller is psychologically able to stand, and to center all thought upon the increase of that margin which

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diverted a single person. Its efficiency of billing out its charges does not drop with its efficiency of service, but remains unchanged.

Watch the future, and see if, as the crisis gathers, the service of every commercial enterprise does not drop, drop, drop, while the regularity of its collections remains unimpaired, and its prices rise, rise, rise—until the instant of final dissolution.

is of no slightest use to the Consumer who pays it. Such a situation is the inevitable result of the relentless law of the survival of the most profitable.

It is in this way that so many aspects of our community-life are determined for us, both as to quantity and quality, apparently relentlessly, by an automatic working of forces which we do not understand, to ends of which we do not approve. All of these departments of the social problem mentioned above, and many a subdivision thereof, are all controlled, from day to day, not by any deliberate, conscious action of the individual human will, taste or whim at all, as is so commonly assumed, but by this automatic balance between economic forces and subconscious biological resistances, acting upon a plane as regardless of human interference as do the earthquakes or the tides.

The Fluidity of Economic Forces.—In order to realize the truth of this we must remember that economic results spread from economic causes as oil spreads ever water. Therefore, in viewing any given bit of causative commercialism, or any given bit of resultant depression in the same locality, the two must not be expected to fit into each other as mates. When we erect a costly electric sign, or insert a full-page advertisement, in New York City, we must not expect to find the people who pass along Broadway injured thereby. Instead, it is the Illinois coal-miners, or the Oregon lumbermen, or the fishermen off Nova Scotia, who find life increasingly a burden therefrom—of course, without knowing why. Causes and effects must not be looked for in the same place, nor in the same industry.

That is why one must always be broad and deep in arguing social explanations. The first rule to be learned by the student in sociology is that *each citizen, industry, class or locality suffers for the sins of all, and all for each.*

The Commercial Brake upon Civilization.—It is not to be expected that the sweeping statements made above, as to the major degree in which commercialism paralyzes society's latent energies and potential taste, will be believed, upon first hearing. For this huge dissipation of our economic energies is now too well disguised, amidst facts too long familiar, to be easily recognized.

This is partly due to its wide, osmotic distribution throughout every cell of the body economic, through the fluidity of its actions and reactions just noted. It is partly due to the consequent difficulty of tracing any detailed effect from its corresponding cause. It is partly due to the fact that we have never known any other or better state of affairs. We have never yet tried a complete national factory-system, in any country of the globe, let alone an international one, co-extensive with our existing commercial system.

Yet this astounding brake upon the natural expression of the human will, which finds its expression, as to the volume and quality of trade, in this law of charging all the traffic will bear, is actually applied at every point of rubbing contact in the entire economic organization. There is not a shoestring, nor a cabbage, nor a share of stock, nor a concert-ticket which can get itself sold and bought, without its operation. There is not a single step in all the intricate maze of processes and transfers through which all manufactured commodities must pass, at which it does not exert its baleful influence. The amount and quality of the food which we eat, of the tenement or villa which shelters us, of the education which we receive, and of the drama which we enjoy, are all determined for us by the action of this automatic, eighty-per-cent-deficit brake.

It is at work, for instance, upon the sale of the paint which protects the lathe which shapes the wheels of the locomotive which transports some of the billion of items entering into the cost and accessibility of each of these things. The old Mother Goose story of: "Water quench fire! Fire burn stick! Stick beat dog! Dog bite pig! Pig get over stile! Or I shan't get home to-night!" is a child's picture of modern industry. And at each of these innumerable steps this reduction of activity by some eighty per cent below the latent normal, through mere commercial impact and friction, is at work day, night and holidays.

Thus the modern body economic, which boasts the "efficiency" of its commercial system (as witnessed by the prices put out thereby) in a truly Prussian spirit, maintains its daily existence only in spite of a continual internal hemorrhage, created by its parasitical commercial militarism, which currently drains it at every point of some four-fifths of its available energy. In part this parasite is splendidly organized, as militarism always is; but in underlying aim it is as lawless and anarchic as militarism always must be.[3]

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[3] The reader will find additional support for the fact of this eighty

Life under Adversity.—At first sight it might seem fantastically impossible that our modern body-economic should actually be maintaining its existence under a continual, parasitical absorption, leakage or dissipation of some seventy or eighty per cent of its natural supply of life-supporting energy. Yet such a thing is neither impossible nor improbable.

For, in the first place, we have no obvious 100-per-cent standard by which to gage our present condition. We have never possessed a complete factory-system. We have never known a materially richer era than now, nor one more cultivated in taste. All of the deficits figuring in this book are relative ones, based upon the potentialities rightfully ours, in view of the marvelous productivities of existing inventions, when organized for use under a complete factory-system. We have no means for ready estimate of how rich our present appliances and technical skill might make us, if organized upon the factory-system —except by some such a laborious process of analysis as this book.

Secondly, the body-economic, in this respect, is merely manifesting a phenomenon which is familiar to biologists in all branches of life. Indeed, it is only as the reader turns from economic to biologic instances that he will be able to comprehend the marvelous elasticity of life in general, which permits it to subsist after a fashion—and to gravitate into such a form that it is natural for it to subsist—upon supplies or opportunities *far below normal for that species.*

Breaking all the traditions of treatises upon political economy, the reader may be referred here to one of Mrs. Gilman's charming and perspicacious poems: "The Sweet Uses of Adversity," which tells how the tall white birch of Norway, the pride of our landscape-gardeners here in America, in the arctic regions becomes a tiny thing in the grass, called "Dog's Ear":

"See now what life the tree doth keep—
Branchless, three-leaved and tough—
In June the leaf-buds peep, flowers in July dare creep
To bloom, the fruit in August—and then sleep.

per cent deficit on page 480. There it is pointed out that commercialism, in its effects upon progress, is like a railway-brake. The resultant retardation, measured in energy dissipated, is far greater than the energy consumed in actuating the cause.

Strong is the tree and rough.
It lives, and that's enough.
'Dog's Ear' the name the peasants call it by—
A Norway birch—and less than one inch high!"

The lesson runs through all biology. Equilibrium with environment now permits life to expand into something commanding admiration, now forces it to shrink into that which excites scorn. But life in the face of adversity does not easily relinquish existence. It responds, instead, with a squaring of the feet and a hardening of the nerves for less sensitiveness and greater resistance. It may be brutalized, as it is stunted; but it is not extinguished.

Social Erosion.—In society's endless effort at harmonizing itself with its environment (in which environment its own legalized internal relationships form the largest part) this continual progress of retardation and degradation of life, into consonance with a restricted volume of economic traffic which has been charged all it will bear, is going on everywhere. In every such a readjustment the balance is ever between onward-pressing life, on the one hand, and the resistance to it originating with the two great divisions of commercialism, namely, interest-bearing capitalism and exhausting commercial competition, on the other—which might well be called economic friction and impact respectively.

It is in this relentless, grinding pressure between the expansive nature of parasitical commercialism, on the one hand—expressing its instinct of self-propagation as insistently as does its prototype, the cootie—and, on the other hand, the biological insistency of human life upon growing, somehow or other—which abrades so many particles of humanity into the down-and-out class, and precipitates them, as human dust, into the charitable or penal institutions.

It is in this balanced equilibrium that is to be found, ever swinging and swaying in fluid stability between these two gigantic opposing forces, the Great Determinant of all modern social phenomena, and with it the Great Issue of the immediate future.

Modern Patriotism.—The citizen who neglects this world-issue domiciled in the skyscraper and corner-grocery of to-day is just as guilty of disloyalty as was he who neglected in 1850 the menacing issue of slavery, until it was too late to avert civil war—or as he who was blind in 1914 to America's responsibility, as a member of the world's civilization, for injustice done in the far corners of Europe. But it is not enough, in the name of civilization, to fight. Bodily courage is not the highest patriotic quality, after all, but one of the commonest; for it protects the life of the state only after it has been sadly maimed.

One must also have intellectual courage and patriotism. One must dare to challenge that which all approve—which is not easy nor comfortable. One must dare to examine, analyze, think, foresee—and then act drastically *before obvious peril to the community has made violence a necessity obvious to the most dull.*

This much, at least, the socialist movement, however erroneous its philosophy may be, now dares to do. That is why it is spreading so rapidly. Does the man who despises the socialist movement possess the intellectual courage and patriotism to set up in opposition an adequately incisive, while more correct, solution of the economic problem?

If he has not, he must not grumble if active, daring, positive, narrow-minded socialism, unyielding in its fanatical courage, soon dominates his pecuniarily selfish and intellectually cowardly policy of dawdling *laissez faire,* or of panicky, spasmodic suppression of radicalism by force. He must not be surprised if this policy plunges his country into a temporarily despotic, cruel and wasteful rule of America by labor-unions or soviets, in a socialistic experiment relentlessly tried.

To be content with jailing or deporting those who have become disaffected by our great American government—not that in Washington, for that does not rule, but that of commercialism, which rules every city and hamlet—is both stupid and unpatriotic. It is stupid because it does not remedy the evil one iota. It is unpatriotic because it does make the bitterness worse.

Modern Lack of Liberty.—To those inclined to observe superficially, this era seems one of remarkable civilization. Because it is intricate and dazzling we are misled into believing it refined and elevated. Because it is complex and frantic we believe it energetic. Because it tangles itself endlessly in commercial red tape of innumerable corporations, multiplied accounts and interlocking directorates, we believe it efficient. Because it is relentless we believe it just.

But, to those who are careful in forming their views, it is none of these. Its underlying human nature is good; but its institutions, through which that human nature must find expression, are abominably crude.

For refinement does not consist in electric signs and jazz-bands. The most powerful energies are the latent and unassuming, rather than the noisy, ones. Efficiency consists in simplicity and directness, and (in economics) *low prices,* rather than in artificial complexity. And as to justice, its first element is a spirit of mercy.

So, if the author believed this civilization of ours to be free and voluntary, as so many do, he must also believe human nature to be evil, as so many do. But there seems no atom of evidence to support either of these beliefs. Our acts are not what we wish them to be. Our civilization is not what we wish it was. But things will never be otherwise until we alter, not somebody else's human nature, *but our own allegiance to certain inherited, but wrong, institutions.*

So long as we adhere to our belief in the great American superstition—our belief in commercialism, our fanatical faith in the sacred virtue of selfishness as the sole motive force in life, our jealousy of the license of each citizen to engage in economic privateering at will—just so long we are slaves. Our acts are determined for us automatically. Our individual wills are impotent for the good which we sincerely desire.

CHAPTER XII

OTHER FEATURES OF INTEREST

RETURNING now to the more prosaic topic of the particular machinery utilized by commercialism for "charging all the traffic will bear," especially in the line of the issue of interest-bearing securities, the way in which the public pulse is felt, in order to know what volume of securities may be issued with safety, runs about as follows. Each new commercial enterprise usually issues three sorts of securities: bonds, preferred stock and common stock. According to the ethics of Wall Street, interest on the bonds *must* be paid, else the enterprise is adjudged bankrupt. Interest on the preferred stock is not guaranteed, as virtually it is upon the bonds; but it is stated in advance that the rate of interest will not exceed a certain figure, and it is understood that the first earnings, after interest on bonds and other prior liens are met, will be devoted to paying this specified rate, if possible.

After all these obligations have been met out of earnings then the common stock is to take, in the form of interest, the leavings. It thus has the least guarantee of receiving any interest at all; but, on the other hand, *no limit to its possible rate of interest is stated.* This rate, usually zero at the start, or far below that of the preferred, may, if the enterprise be sufficiently successful, exceed that of the preferred stock.

The bonds issued usually represent approximately the outlay for appliances purchased outright; but whether this be true or not has no bearing upon the right or wrong of interest. This was explained in Chapter X. This outlay is not often met in entirety by cash by the new enterprise. Instead, the bonds are often accepted by the concerns furnishing the appliances, in part payment therefor.

The Expansion of Financialization.—Indeed, the birth and growth of this practice, with its variations, has so revolutionized our national methods of organizing industry, during the last quarter-century, that a business man of 1890 would find himself at sea to-day. The whole aspect of our more prominent engineering houses has been transformed, to meet this modern condition, from that of shops or designing-offices pure and simple into concerns more or less completely financial in character and function. The larger ones have become all but actual bankers; the smaller ones rely upon affiliation with regular banking-houses.

In the chapter upon Credit it was shown that many lines of enterprise which are nominally quite different from banking, such as insurance, etc., are in reality but branches of our ramifying and unorganized system of interest-bearing credit, upon which we must rely for all our daily activities. Of these branches the engineering of novel technical enterprises has now become one of the most important.

A generation ago the only commercial properties used as a basis for gambling on 'change were governmental securities, raw food-commodities such as wheat, corn, cotton, etc., marine risks, and railroad and mining stocks. But since then Wall Street has been invaded by a horde of "industrials" which have relegated these earlier ventures into secondary importance. To-day a man cannot put a tin-can into the fire, to melt off and save the solder, that paper-securities representing various ownerships, or chances of profit, connected with the job are not listed on 'change by the million, and their daily fluctuations in valuation given space in each morning's journals, or reported hourly over hundreds of tickers.

Preferred and Common Stock.—The preferred stock, in turn, is commonly spoken of as representing the cash contributed for current operative expenses; but whether this be true or not has no bearing, any more than has the destination of the bonds, upon conclusions as to the nature of interest.

Finally, the common stock, which is thrown out on top of the bonds and the preferred stock, is commonly known in business parlance as the "good hopes" of the enterprise. While good businessmen are careful not to issue common stock to such volume as to have no valuation at all, either by estimate of the public at the start or by earnings later, yet the market-valuation of the common stock is by far the most widely open to conjecture of the three forms of security. Inevitably, also, there is always the minority of less scrupulous promoters who issue stock so near the ragged edge of nothing, as to valuation, as to keep the market fully up to, and constantly aware of, the limit to issue apparent in the fact that the consuming public has already been charged all the traffic will bear.

Gradation of Commercial Risk.—The entire plan is based upon a desired gradation of the several sorts of security *as to risk of principal and fluidity in rate of interest.* The bonds represent the greatest security of principal, with a guaranteed rate of interest; they therefore fluctuate the least in market-valuation. The preferred stock is a degree more uncertain, for it may receive no interest at all; but it has first chance (after the bonds) to do so. The common stock is the purest gamble of the three, and may attain almost any market-valuation, up or down, as the earnings of the enterprise wax or wane.

Such is the assortment of goods offered to the public taste by the financier. It is just as essential in finance to have a list graded to suit all preferences as it is in the grocery, dry-goods or hardware businesses.

There are, of course, many other sorts and gradations of interest-bearing securities than these three; but these will serve to illustrate the plan upon which they are classified and appraised in the commercial world. They also serve to show how the greater number of them owe their entire valuation *neither to any original history of the securities, nor to any temporary unproductiveness of the enterprise, but to a present earning-capacity which is absolutely independent of any peculiarities of source or origin—an earning capacity which depends solely upon current ability to extort high prices from the Ultimate Consumer.*

Stock without Face-Value.—That this is merely a fair statement of the universal state of affairs in the commercial world, and no unfriendly indictment, is proven by one fact which is far more eloquent than any words which might be quoted for or against commercialism. This is that recently there has entered the practice of issuing common stock *without any stated face-value.* That is to say, instead of the prospectus stating, as formerly, that there would be so many shares of, say, $100 par value each (which shares might sell at only $10 each when the enterprise was first launched), both the prospectus and the stock-certificate say merely so many "shares," without assigning to them any nominal valuation.

This practice is an unequivocal, although tacit, admission that what is shared is not any specific fraction of the appliances involved, for everyone knows that these appliances may, and surely will, depreciate to ultimate nothingness, yet without any parallel depreciation of the valuation of these shares. Nor is it any specific fraction of the material produce coming from those appliances; for that produce may be very great, and may be just what the community much needs, yet, if it be not sold at a profit, the shares are worthless.

The thing shared is the *current net profits,* and these do not depend upon any past history of the stock-certificates, nor of the money or credit invested in them, but solely upon current success in selling goods. The stock-certificate brings merely a share in the game of extorting profits from the Ultimate Consumer.

Thus the market-valuation of those unlabeled shares is admittedly so open to future, conjectural fluctuation, resting upon something entirely subsequent to the origin of the stock, that it is not worth while to give it even a nominal figure in advance. In this way this practice is, in the vernacular, "a dead giveaway" of the fact that interest drawn in the form of dividends upon stock is purely an exaction of tribute from the Ultimate Consumer, and therefore is indeterminate beforehand in amount.

Yet this policy of issuing unlabeled stock gives every sign of having come to stay. As yet it has aroused no adverse criticism, on the score of injustice to the Ultimate Consumer of the commodities made or traded in connection with it.

Watered Stock.—To-day few people ever trouble themselves to try to connect such issues of common stock with actual investments of cash in tangible appliances. It has come to be tacitly recognized that such a question has no bearing upon justice to the investor embodied within the stock. As to justice to the Ultimate Consumer, that is an equity as yet undreamed in the financial district.

The doctrine that interest must be based upon any such an investment, in order to be equitable, has now quite ceased to be even a pretense "on the street," among the commercialists themselves. It is true that in academic discussions of the nature of interest, or for the repulse of assaults by would-be reformers upon some small bastion of the commercial fortress, this doctrine always bobs up promptly—to serve chiefly as an obstacle to rational debate of the real issue. But in the financial district itself no one ever bothers any longer to wiggle the legs of this scarecrow into semblance of life.

Wall Street cynically accepts the fact that the market-valuations of all securities depend solely upon the rate of interest which they may succeed in paying, and not upon any inherent value lying latent within the securities ever since their creation, whether that creation were by investment of cash or otherwise. Wall Street really, although not frankly, accepts interest as what it really is, namely, a pure hold-up of the Consumer. In the commercial form of hold-up, as in any other, the profitableness of the enterprise, and hence the valuation of a share in it, depends solely upon how much the victim proves, after experiment, to have had in his pockets.

Appraisals and Rates.—The railroad-properties of the nation have now for five or ten years been undergoing an inconceivably slow and costly appraisal of their tangible valuation. This is likely to occupy ten years more, and is sure to be already quite obsolete before it can be finished. This appraisal has been undertaken in response to this widespread justification of dividends, by both college-professor and commercialist, upon the grounds of *original investment.* For, if this justification be warranted, then the first need of the people is knowledge as to this original investment.[1]

So this costly and impracticable appraisal has been undertaken by the government, in a charmingly childlike oblivion of the fact that even complete knowledge as to the present valuation of these properties would throw not the slightest light upon the amount of the original investment, nor upon its source. Also in oblivion of the fact, to be demonstrated later, that commercial valuations and commercial costs of replacement always *must* prove to be in mutual consonance, because *one depends upon the other.*

Yet we shall quote later to show that both the academic advocates of commercialism, in their treatises upon the general nature of interest, and also the highest officials of our larger railway-corporations, now disclaim publicly any connection between the dividends paid upon their securities and either the past or the present cost of their tangible appliances. According to both these authorities, *the valuation of securities depends solely upon the*

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[1] Written long before the United States entered the Great War and took control of the railroads.

rate of interest or dividends which they are able to extort from the Consumer; and this, in turn, is quite independent of any history of origin.

The Origins of Capitalism.—Although it is insisted here that this doctrine is correct, that neither the rate of interest nor the valuation of interest-bearing securities depends at all upon the history of the original investment, yet it is important, since others proclaim the opposite, to inquire as to the origins of modern capitalism.

Thrift and Capitalism.—In the first place it is obvious that, whatever may have been the case in earlier times, in recent decades no appreciable volume of capitalism can arise through the thrifty savings from productive wages. Modern capitalism maintains a rate of growth—men becoming millionaires within a few years, and the nation as a whole creating tens of billions of new capitalism within a few months—which cannot be approached by the savings of even the most exceptional producer.

As noted above, a producer who saved ten thousand dollars yearly would be a phenomenon. The author doubts if any such ever existed. Yet the financier who accumulated capitalism at the rate of only ten thousand per annum would be an insignificant piker, quite out of the race in the fields of high finance!

According to the New York *Times,* a conservative sheet upholding commercialism, Mr. Rockefeller's fortune grew by eight millions in one day, presumably while he played golf. What can the thrifty wage-earner do to keep up with this pace?

Yet *if he fails to do so he gets poorer daily.* As noted above, unless he happens to enjoy capitalism of his own to a most unusual amount, in proportion to and in addition to his wages or salary, *he cannot even hold his own against the growth of outside capitalism against him,* to say nothing of net saving.

Re-invested Dividends.—In the second place it is obvious, without necessity for any display of statistics, that the bulk of all modern capitalism is *re-invested interest, dividends, profits or surplus.* There is no "intensive farming" in the world, putting back into the ground, to seed again, the bulk of what it extracts, which can compare with that of commercialism.

Indeed, commercialism thereby classifies itself with a whole group of institutions from past history, such as French absolutism in 1780, American negro-slavery in 1850 and German militarism in 1880, which *cannot help growing.* They feed upon their own vitals.

But this is no sign of health. The fact that "money begets money" is no proof that the process is a wholesome one. Capitalism cannot be justified in paying dividends, upon the score of its origin, for a moment after it has been discovered that capitalism consists of re-invested dividends. The snake-egg is as evil as the snake.

If dividends be wrong, then the re-investment of dividends, in order to extort more dividends, is more wrong. If dividends be right, then *that fact must be made obvious from some consideration quite other than the present origin of capitalism in re-invested dividends.* But such other consideration has not yet appeared.

If dividends be right, then reinvesting those dividends multiplies the right—which is the position of the commercialist. But if dividends be wrong, then reinvesting those dividends, and demanding additional dividends upon them, multiplies the wrong.

It is not merely our contention that the latter is the truth. It is that *no sanctification of present dividends may rest upon the mere fact of past investment.* For the question still doggedly remains: What, and whose, was it which was invested?

Surplus.—But even the process of re-investing dividends and profits is too slow a method of getting rich for modern high finance. Those smaller businessmen who have remained content merely with making fair wages in the form of profits, saving some of it, and then re-investing, quite fail to realize how completely they are being "done" by the larger methods of finance. For the process now more popular in the financial world—although not the quickest and most popular of all—is the *accumulation of surplus.*

"Surplus" is properly a fund accumulated out of the gross receipts from the Consumer, after the payment of all expenses (such as wages, salaries, materials, depreciation, insurance, selling-costs, etc.) and the deduction of all sorts of interest-charges, dividends, profits, etc., accruing to the financial end of the business. It is particularly to be noted that this list includes the purely commercial items of interest, rent, dividends and profits, as well as all natural, factory-system costs.

That is to say, a surplus is a surplus only after the Ultimate Consumer has first paid every conceivable natural cost for the service rendered, and also all those additional commercial costs of financing and selling which are condemned in this book—and then, in the price paid across the shop-counter, *has given up something additional thereto, called surplus.*

In other words, even if we accept completely the commercialists's view that interest, dividends, profits and costs of competition are right—which we deny—nevertheless surplus remains unquestionably *money contributed by the Consumer over and above every conceivable cost, both natural and commercial, of the services rendered.*

Therefore this surplus rests in the hands of the dealer not as an equitable reward for something given to the Consumer by the dealer, *even in the commercial sense,* but only by force of might —because the Consumer would rather submit to this robbery in the form of surplus than to forego all intercourse with the producer of what he desires—or to combine with all other Ultimate Consumers to assert his rights, as the only alternative. For the Consumer it is a Hobson's choice, at best, or a slave's choice at worst.

Who Owns the Surplus?—It is to be noted most carefully that the general policy of accumulating a surplus, whether in a grocery, a peanutstand, a bank or a railway-system, as a necessary and wholesome precaution against fluctuation in events, or for the expansion of facilities, is not condemned here in the slightest degree. But what is condemned here, in unlimited terms, is the doctrine that this surplus should ever legally or automatically become the private property of the grocer, the peanut-vendor, the banker or the railway-corporation.

Surplus should unquestionably be accumulated. But after accumulation it should still remain the property of the Ultimate Consumers, who contributed it over and above every conceivable return in goods or service—even if one admits the equity of purely commercial charges.

Surplus the Foundation of Commercialism.—This process of accumulating surplus in the name of the seller is going on continually in every successful business in the land. Every retail store and apartment-house, as well as every department-store, factory, railroad or "holding-corporation," is growing in prosperity upon this plan, quite in addition to the other methods of accumulating capitalism non-productively which are condemned herein.

The mere fact that the petty dealer may not be getting rich "too rapidly," because losing so much as he makes his purchases across other shop-counters than his own—so that he fails to accumulate as rapidly as the big fellows, and so loses into their hands—has nothing whatever to do with the folly and injustice involved in his being allowed to loot the Consumer of his surplus. The fact that robbery is a losing business for most robbers is not our strongest argument against robbery. Indeed, it has no corrective force at all.

In defense of this crime of transferring the legal title to the surplus from the Consumer to the dealer, not a syllable can be said to distinguish it from the more familiar species of robbery. Not a syllable of the many arguments urged in defense of interest, profits, competition, etc., is applicable to the looting of the Consumer's surplus. The crime continues merely because those who are responsible for denouncing it are afraid to do so.

Yet a very large and rapidly increasing portion of all the interest-payments now being exacted from the Consumer are based upon funds of capitalism which were contributed originally by the Consumer himself, in the form of surplus. Virtually all of the rest are based upon capitalism which was contributed by the Consumer more indirectly, in the form of earlier payments of rent, interest, dividends and profits, now re-invested. And most of these earlier dividends, etc., were based upon capitalism derived from still earlier contributions of pure surplus by the Consumer himself.

In none of these cases was there any actual investment or sacrifice by the capitalist himself. He acted merely as the unauthorized agent of the Consumer, living in comfort while he reinvested funds which were not, in equity, his own, however they might have been in law, and which cost him no sacrifice.

In the case of the surplus this fact is obvious and incontrovertible. In the case of the re-invested dividends, etc., it is less obvious because less direct; but it is none the less true for all that.

These facts force the protagonist of interest to prove the equity of the institution from some other fact or argument than that of *investment*. This other basis, we shall see, can nowhere be found.

The "Absorption" of Securities.—Still we have not yet considered the baldest aspect of this plan of enforcing the Ultimate Consumer to contribute capitalism to the commercialist. This last aspect consists in the modern policy of merely issuing paper—whether bonds, stock-certificates or what—against mere hopes for future profits, then extorting the profits, and then circulating the paper as negotiable security for loans, purchases, etc.

Thus these privately issued fiat-monies have become real money. It is no exaggeration to say that this country's present vast financial fabric—indeed, that of the international commercial world—has actually been built up by reliance upon a fiat circulating-medium no more sound than that!

It is because the menace embodied in this fact threatens our businessmen as direly as it does the public, that this analysis can be as impartial in spirit as it is. The whole negotiable value of all commercial securities now depends solely upon *current profits,* rather than upon past investments. Therefore, the instant that profits in general are interrupted this whole fabric of negotiable credits may crash to the ground overnight. Hundreds of billions of valuation may evaporate within a day or so.

But that remark was parenthetical. Our present business is to trace the nature of interest.

In the earlier chapter upon Credit there were listed a number of local instances of "get rich quick," as they happened to be reported in the daily press. Some of them dazed even such a hardened old exploiter as Russell Sage himself. This statement of modern methods of finance, just given, furnishes their explanation.

This modern method of creating purely fiat credits, which later become real money through the forced contributions of the Ultimate Consumer, has a bold and obvious piracy about it which shocks the reader more easily than the older methods did; yet it is to be noted that the robbery of the Ultimate Consumer by this method is little worse, in aggregate, than by the earlier method of accumulating surplus. The chief difference, indeed, arises in the factor of *time.*

That is to say, in the "surplus" method of acquiring capitalism the surplus is collected from the Consumers first, and then the certificates of capitalism are issued against it afterwards—in the larger corporations by "slicing a melon"; in the smaller ones by various methods. In the "absorption" method of acquiring capitalism, on the other hand, the certificates are issued first, and then the surplus necessary for their support is collected afterwards. When this has been accomplished the certificates are said to have been "absorbed."

That is why Russell Sage could not understand modern rates of expansion. In his day capitalists had been content to extort money first, and count it afterwards. The modern method of not merely counting your chickens, but actually selling them, before they are hatched, he could not comprehend.

The only difference between the two methods is that the loot, in the latter case, technically never becomes surplus at all, being merely interest—a "fair return," we suppose—upon capitalism already printed. It thus avoids, apparently, some of the invidious public regard now becoming attached to surplus.

But the distinction is only skin-deep. Both sorts of capitalism are sheer loot.

Legal Restraints upon the Expansion of Capitalism.—Of recent years the law has always attempted to enforce some measures of protection against the irresponsible, baseless expansion of capitalism; but these efforts of the law have so far quite failed to prevent the situation from becoming rapidly, acceleratingly worse. This failure to protect, it can easily be explained, lies inherent in the fact that *the sole aim of these laws, to date, has been the protection of the investor, and not the protection of the public.* Protection of the public of Ultimate Consumers, as against the subconscious rapacity of the investors, has never even been dreamed, let alone accomplished.

That is why the situation is now getting so rapidly and acceleratingly worse. The investors find themselves amply protected, and so demand no further reform. But this satisfactory condition has been attained not only while, but actually *because,* the public of Ultimate Consumers is being increasingly looted each year.

That is one reason why the situation is so menacingly uncontrollable—so defiant of political action for reform. *No law can protect the public which does not rob the investor of his present license to collect surplus*—and to do that would collapse the entire financial fabric immediately.

The Acceleration of Surplus-Looting Expansion of Capitalism.—It is to be noted, with what calm, cold-blooded, scientific spirit one can muster, that this utterly defenseless aspect of capitalism is rapidly upon the increase. To-day we have already reached a point where the major portion of all capitalism rests upon a foundation of equity no less fantastic, and even insolent, to the Ultimate Consumer than this—of extorting from the latter, by pure force of circumstance, tribute in excess of every conceivable cost of service rendered (including even commercial costs), then "investing" that tax in the commercialist's business and in the commercialist's name, and then finally collecting from the Consumer and his posterity endless tribute thereon, called "interest"—*brazenly excusing this last act on the score of the original "investment" having been made at such "sacrifice" by the capitalist!*

And yet, if the accurate, candid mind finds itself forced to style this act as simple, unadorned robbery, one is accused of seditious radicalism! Yet such is the true aspect of that much boasted "initiative" of the commercial system. It is, in effect, the initiative of the pirate—for it took character, courage and enterprise to maintain profitable command of a pirate-ship.

But neither of these sorts of initiative are wanted in civilization. The real initiative of modern progress, let it be remembered, which manifests itself everywhere in scientific discovery, invention, superintendence of true production, etc., *is all rewarded by salary, wages or royalty,* and has nothing whatever in common with commercial initiative.

The Ultimate Consumer the Sole Source of all Capitalism.—Thus, directly or indirectly, *virtually all modern capitalism has been furnished by the Ultimate Consumers.* If legal title to it is to be permitted to exist at all, that title should rest to-day in equity, without further payments, with the Economic (not the political) Democracy of Ultimate Consumers.

This question as to the rightful ownership of surplus, however it may be overshadowed just now by the Great War, is rapidly becoming a vital issue. Immediately the war closes it may be expected to come to the front.

Cost of Replacement.—There is another aspect of this question of the relation of interest-rates to original investment which deserves careful scrutiny. This is the common allegation by the commercialists—made in the same breath with the protests, to be quoted later, that there is no connection between interest-rate and cost of property—that, if the property had to be replaced, it would cost such a sum that the dividend-rate thereon would be only equitable. Such an allegation, for instance, has appeared within a few days in the official bulletins in the New York surface-cars, as to the rental-rates of certain leases. It is also a stock-argument in the mouths of all the corporation-lawyers who plead before public-service commissions for higher rates for their clients.

But this argument, while it is based upon the indubitable fact of a plain parallelism between principal-valuations and interest-charges, yet puts the cart exactly before the horse. *For it is the interest-charge which creates and justifies the principal-valuation, and not the valuation which justifies the interest-charge. Costs of duplication, upon the average, depend upon the market-valuation of the securities, and not the valuation of the securities upon the cost of duplication.*

That is to say, one of the major elements in the cost of all commodities and appliances (and hence in the prevailing scale of wages) is the volume and interest-rate of the burden of securities carried by the community.

Now commercialism is one of the most fluid forms of energy known. The continual selection of one investment or another by those engaged in trading securities, and the interminable intricacy with which every commodity mingles itself and its price into the body and price of every other commodity, make it one of the fundamental laws of commercialism that the burden of interest-bearing securities *tends always to be the same in all general lines of production.*

It is never quite the same, it is true; but as soon as it gets out in any one line there is always pressure to bring it back. As rapidly as the commercialists can buy and sell they promote equilibrium. There tend to be as many negative departures from this equilibrium as positive ones.

Therefore the prices of all commodities and appliances, upon the average, depend primarily upon the country's average burden of interest-charges and costs of competition—and these two, it has been seen, are themselves always mutually balanced. The principal-valuation of the securities, both as to price and as to aggregate volume for the land, also depends, we have seen, upon the aggregate interest or dividend charges currently paid by the community.

Therefore the costs of replacement and the valuations of securities, as quantities ever balanced against each other in stable equilibrium, *are together balanced against the interest* *and dividend charges which create them.* These three quantities sway up and down together, always interlocked—as an excellent record of the contending forces put forth by the Ultimate Consumers on one side and the commercialists on the other, but as no record at all of whether those valuations have been justified by earlier investment in appliances or not.

Costs of replacement and interest or dividend charges can no more get away from each other than the tidal seawater of an estuary can get away from the fresh water which it backs up into the river. As they surge back and forth they must surge together.

To replace industrial properties to-day would cost many times their original cost, because the aggregate interest-charges of the land to-day are many times what they were a generation ago. Because of those greater interest-charges prices are higher, proportionally thereto. Therefore the interest-charges must always automatically remain "reasonable" in proportion with the valuations and the present cost of replacement.

Watered Stock.—Thus all visible "water," in the sense of a disparity between capitalization, cost of replacement and dividend-rates, is automatically eliminated currently from all commercial properties. This beautiful balance can be pointed out with pride by every philanthropic business-office in the land! But the fact has no slightest bearing upon the equity or inequity of interest.

Censored Publicity.—While there is unanimous agreement on the part of the commercialists to hang on to the surplus, yet there exists great diversity of opinion as to how far the policy should be publicly avowed, or how it should appear in the published book-keeping. Ordinarily it is carefully cloaked; but occasionally some corporation-official becomes indiscreetly frank, and the truth comes out before his colleagues can hurry to seize the hook.

Thus for some years now the railroads, quite oblivious as to whither the doctrine was leading them, or how it might be quoted against them in the future, have been openly urging, through the sworn statements of their high officials before public commissions, through the editorials of prominent railway-journals and through their retained "publicity-counsel," the doctrine that *the valuation of a commercial enterprise depends not at* *all upon its cost, but solely upon its "earning" (that is to say, its taxing) power.*

But any such a doctrine as that upsets every commercial and academic theory of the nature and equity of interest ever advanced. It leaves solid foundation for only one practical explanation, and that is the "hold-up-the-public" one. Occasionally there steps into the limelight an official whose able mind and honest nature forces him to recognize this fact.

Commercial Authorities under Oath.—For official light upon the process of accumulation of surplus, reference may be had to testimony before the Interstate Commerce Commission—not because the railroads are worse sinners in this line than are others, but because they are forced to debate this matter in public with a frankness not compelled from other corporations; yet with a frankness, withal, which plainly lacks much of going to the root of the matter. The Commission probes with an interested and commendable diligence, but it is plainly hampered by a Supreme Court decision that the roads are entitled to "earn a reasonable return" upon their "capital"; and also by the wide popular acceptance of the idea that a seller may do what he pleases with the money paid to him across the counter—a standard of ethics on the part of the Consumer which seems an exact parallel with the honor of the gangster, which compels him, even when wounded unto death, to uphold to the last the divine right of every man to go armed and to settle his scores against others by his own might or cunning.

The Commission is plainly at every point searching for some rational, equitable basis or principle underlying the making of railroad-rates, which may serve it as a guide; but it finds nothing but an intricate mass of evasions and irrelevancies—except for one frank avowal of the right to "charge what the traffic will bear"—coupled with a universal assumption that, because there must naturally be a surplus, that surplus is necessarily the property of the road, and is properly the basis for further exaction of such interest-rates as will "attract" those investors who are scrambling over each other in their frantic eagerness to find opportunities for investment.

Thus testifies Mr. Park, vice-president and general manager of the Illinois Central Railroad:[2]

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[2] These quotations are from the same source as referred to in Chapter X, namely, Document 725, 61st Congress, 3rd Session, recording a hearing before the Interstate Commerce Commission.

> *Question:* "You think, then, there ought to be sufficient money collected from the public to pay operating expenses, fixed charges [interest on bonds], 7% upon the stock, and to provide a surplus over and above what should be paid out of the surplus. Now what should be paid out of the surplus.
>
> *Answer:* "That which adds to the stability and solidity of the property, and perhaps not to the earning power."
>
> Q. "You mean betterments and additions to the property?"
>
> A. "Yes; a certain class of betterments that do not add to the earning power." . . .
>
> Q. "If there was to be a return upon the total cost of the road, and this $7,600,000 was collected from the public and invested in the stations you refer to, that the public authorities, in making the rates in the future, should allow a return to the stock-holders on that $7,600,000; is that your proposition?"
>
> A. "I think that would be fair; yes."

[But if the investment does not add to the earning-power, why should such payments be "fair," even from the standpoint of the commercialist? The entire attitude of the roads as to rates is one of incoherence.]

> Q. "What do you mean by an investment not being attractive unless there is a surplus?"
>
> A. "Well, if I, as an individual, can get 12 or 15% out of some business, or 18 or 20% out of a bank, and only 4 or 5 or 6% out of a railroad, taking into consideration the risk, I think probably I would invest in the merchandise business or manufacturing or the bank, rather than in the railroad."

Mr. Blauvelt, Comptroller for the Illinois Central, testified as to the "value"—he was careful never to say "cost"—of the "additions and betterments" made since the road was originally built at an apparent cost of nineteen millions. But of the $258,000,000 thus spent during the fifty-four years, at an average rate of about five millions per year, only $29,000,000 had been appropriated for this purpose during the last nine years. According to Mr. Blauvelt:

> "You understand a railroad company will not infrequently spend millions of dollars of its current money and run into

> debt and then issue bonds. How can you tell whether the money used for additions and betterments is spent from stock or bonds or from income?"

Among the other roads added to the original Illinois Central of 1856 was the Dubuque & Sioux City, its nearly twelve millions of stock being purchased by means of an issue of seven millions of I. C. R. R. stock. Commissioner Clemens asked if a "reasonable" rate should include dividends on both the seven millions of Illinois Central and the twelve millions of Dubuque & Sioux City stock. Mr. Blauvelt is not quite conclusive in his answers:

> "If you should take them separately, I should think the D. & S. C. would be entitled to earn a return on the cost of that property. If eleven millions was invested in that property it should be entitled to earn a return on that. . . . That is, assuming the I. C. Co. issued seven millions of stock to purchase at eleven millions. If the I. C. Co. received a return upon the amount invested there, and did not receive any net earnings, then I should think you would eliminate the returns."

Clear, isn't it? But both issues of stock are held by the same corporation and represent a single investment. Note also the tacit assumption that the mere fact of a paper investment, without any regard to whether that investment ever did any good to the Consumer, is considered the sole basis requisite for charging dividends "rightfully." Note also the light and graceful way in which the volume of interest-bearing securities is inflated by four or five millions, in the mere act of transfer of title, is passed over without comment.

But Mr. Blauvelt's superior officer, Mr. Park, leaves no doubts in the air in his testimony as to what he regards as "reasonable" rates:

> "There are a great many elements that enter into the proposition of a reasonable rate. One of them is the comparison of the cost of transportation with other forms of transportation; another is the value of the service to the shipper, and a number of other elements, probably the preserving of the business equilibrium."

[But this is merely stating one method of "charging all the traffic will bear," or all that can be charged and collected in the face of competition.]

> Q. "What does the value of the service to the shipper mean?"
>
> A. "That which would enable him to earn a fair profit on the business he was conducting."
>
> Commissioner Lane: "The Supreme Court has said that you cannot base rates on the profit which the shipper makes."
>
> A. "Well, it would seem to me it should be a consideration. There are a great many elements entering into that. I do not know as I could explain or define all of them. As I have said, it is a complex and perplexing problem. . . . I have no definite or well defined ideas as to that."

And the reason is that, the railroads' prime guide in determining rates having been torn from them, academically at least, by the decision of the Supreme Court, nothing in the way of a guiding principle is left to them.

Later (Vol. I, pp. 598-600) Mr. Park commits himself again to the proposition that moneys taken from current income for betterments not visibly adding to the earning power should be capitalized as a part of the value of the property; "and when so capitalized" he would "exact dividends or interest upon that capitalization." But the admission comes only after an indirectness of speech which warrants inference of an uncertainty in making it.

> Q. "I was speaking of that portion of your surplus that you did devote to just such structures as you were illustrating with your hundred-thousand-dollar depot. I understand you to say that that sort of investment or application of the money was proper to be made out of this surplus from current income. Didn't you say that, Mr. Park?"
>
> A. "Yes, sir."
>
> Q. "And when you did invest any portion of that surplus, whether it was one . . . or two or three of the seven millions, in those permanent betterments, they . . . become a proper basis for further capitalization, do they not?"
>
> A. "They would; yes, sir."
>
> Q. "And when they are capitalized, then the result would be that the capital would be entitled to its returns in the way of dividends and interest, just like any other, would it not?"
>
> A. "Yes, sir."

The matter was taken up at length by counsel for the railroad, in re-direct, but with no difference in result, except to bring out the fact that the surplus had not actually been capitalized, in the sense of an issue of bonds or stock against it, but that it stood merely as value of road—which is of course the same thing in effect, so far as rates are concerned. Counsel argues that no road can borrow all needed for improvements—that no business can do that—but that some betterments *must* come out of current surplus. But that is not the question. The question is: *Who owns the betterments after such expenditure has been made?*

Official Data.—Statistics submitted by the road itself showed that during the ten years from 1898 to 1907, inclusive, over twenty-nine out of nearly thirty-five millions of surplus had been expended for "additions and betterments." Previously to 1898 this surplus had ranged from virtually zero to half a million annually.

But in 1898 entered everywhere the era of modern high finance. The surplus of this particular road increased in a single year over tenfold, and during the following decade increased to three times even that.

Then came the inevitable reaction. During the next three years the surplus all but disappeared, no betterments were undertaken, and the "estimated deferred work" rose from nothing to almost four millions per annum. *But during these same three years the "fixed charges"* (*bond-interest chiefly*) *and dividends not only remained undiminished, but actually increased!*

These figures are presented by the railroad as the chosen spokesman for the other roads, and must be taken as fairly typical of all the better managed railroads of the land. The fact just italicized must stand as statistical support of the statement, which will be urged elsewhere herein with emphasis: That *under the commercial form of organization returns to capital must be given precedence over service to the people.*

The superintendent who handled a road so that it gave ever so perfect service, yet paid no dividends, would lose his job. The same sword hangs over the president. In this case at hand, the lack of traffic due to the panic was beyond the control of the road; but it should certainly, in any sort of equity to the men and the public, have cut off dividends first and left the surplus untouched.

The same policy is stated even more clearly by Vice-president

Gardner, of the Chicago & Northwestern, who was also President of the Chicago, St. Paul, Minneapolis & Omaha:

> "Regulation by the Commission does not control the commercial conditions under which we get money, and unless we soon may get higher rates, we will, in the future, have to run out the red flag. We must be allowed a satisfactory cash surplus above everything each year as a barometer of our surety for credit."
>
> Q. "Would you still say you should have a right to secure that yearly surplus if you knew your road had, in ten years, paid on eighty-five millions of stock *dividends amounting to fifty-six millions* and had in addition an unappropriated surplus, taken from earnings, of *thirty millions more;* an amount of net return to the stockholders of *more than the capital stock?"* (Italics mine.)
>
> A. "Yes, I would. I consider its need only from the standpoint of *keeping up credit."*
>
> Q. "And in the face of the showing I mentioned, you think that also is required for maintenance of credit?"
>
> A. "I do."
>
> . . . .
>
> Q. "What would you do with this yearly surplus?"
>
> A. "I would put it back into the property. It is due either to high rates or to economical management, and belongs to the stockholders. Unless it is put into dividends, as their direct cash return, I think it ought to be put by the management into their property, so it still will go back to them."
>
> Q. "And if it were put back into the property you would expect it to earn its share of dividend, as any other part of the investment, wouldn't you?"
>
> A. "Yes, I would."
>
> . . . .
>
> Q. "I understand broadly from your testimony that you think the C. & NW., if it is to prosper in the future, will have to have its rates increased?"
>
> A. "That is what I am endeavoring to affirm. . . . We must have sufficient income to have a surplus each year."
>
> Q. "You make that statement with knowledge of the surplus you now have on hand and have laid aside during the last ten or twenty years, which, I believe, is reported to the Commission as thirty millions?"
>
> "A "Yes."
>
> Commissioner Clark. "The thirty millions has been spent?"

A. "Yes; it has been, out of surplus income and gone to profit and loss."

Mr. Lyon. "I wanted to know if you made this statement with the knowledge before you that on an average capitalization of $85,000,000 during the last ten years, this railroad had paid out $56,000,000 in dividends and had, as I understood it, $30,000,000 additional making the $86,000,000——"

A. "Yes; and that money has gone back into the property and not been capitalized by issuing bonds or stock certificates. That is just what serves to maintain our credit and enables us to borrow at 4%."

Q. "As I understood you, you would not care to express an opinion as to what should be done with this surplus money that is gathered in over what might be termed a reasonable rate?"

A. "Oh, yes; I said that it should be put back into the property."

Q. "Should it be the basis of rates for the future?"

A. "If valuation is an element in rate-making, yes."

Q. "A great many railroad men contend that value has no relation to that subject, and I was asking you if you collected $100,000,000 above the reasonable rate in the next ten years, and it is put back into the property, should the people pay a rate on that hundred millions?"

A. "Well, my answer will be qualified by the amount. If you had, said twenty-five or thirty millions in ten years I should say yes. I do not think we should have an extravagant surplus. . . . It should be large enough as an insurance against the loss of crops for two or three years, or a calamity, or something of that sort. . . . *The surplus does belong to the stockholders. . . . It represents a remunerative rate as well as efficient administration.*" (Italics mine.)

Commercial Standards of Efficiency.—So this is what constitutes "efficient administration" in the commercial field! We now have it frankly from official source. The fact, so simple and plain in our imaginary factory permeated with ownership-in-industry, namely, that enterprise and efficiency in those who abandoned bench and machine for ownership or negotiation consists crassly in unlimited nerve in bestriding production, like an Old Man of the Sea on Sindbad's back—transferring money from Consumer to bargainer without a ghost of a return—commonly becomes beclouded amidst all the intricacies of the huge modern corporation. But here we have its true essence clearly revealed.

But the very question under debate by the public to-day is: *Does* the surplus belong to the stockholders?

If the surplus be due to high rates, then it certainly belongs to the public; for high rates are a disgrace to those who determine them, and a credit to those who pay them. If the surplus be due to an efficiently operated road, then some of it belongs to the wage-or-salary people who operate the road. But *not one cent of it can ever honestly go to the commercial officials or the stockholders.*

The very willingness of Mr. Gardner to have the matter hinge upon the *amount* stolen from the shipper, in the form of surplus, shows both the muddiness of thought and the vague consciousness of inequity somewhere which pervades most administrators of large properties. But amount has nothing to do with equity. If a hundred millions is wrong, one dollar is wrong.

Nor has the accumulation of a surplus against disaster anything to do with charging the public interest thereon. Certainly a liberal surplus should always be on hand. Certainly it should belong to the public, and not a cent of interest thereon appear in the rates.

Official Views as to Railroad-Rates.—But, since railroad-rates are the best public expression of views as to the nature of interest coming from commercialists of high authority, it is well to complete the statements of the latter as to their attitude. The position taken by Mr. Ripley, then President of the Santa Fé road, is as follows:

> Q. "Why were the rates raised?"
>
> A. "They have not been raised. An attempt was made to raise them, for two reasons—one was that they were too low *per se* . . . but perhaps the most potent reason was that we needed the money."
>
> Q. "Why were they too low *per se?*"
>
> A. "Because the commodity rates . . . had been forced by various causes . . . to a point which was unreasonable from the standpoint of the value of the service to the shipper, and unreasonable also from the standpoint of return to the carrier. . . . These rates were the result of the competition of commodity with commodity, the competition of locality with locality, and more than all, the competition . . . by the ship-

> pers themselves. The railroads have always been absolutely helpless as against the shippers."

This "per se" argument is merely a frank avowal of the policy of charging all the traffic will bear. Mr. Ripley's words merely mean that the road discovered that the shippers had more money in their pockets than the roads thought they had.

[Mr. Ripley's position is that the road ought not to have to sell its bonds below par:]

> "It is very important, I think, that railroad credit should be maintained *in order to afford opportunities for investment."* (Italics mine) . . . *"First and foremost, there never was any better definition of a reasonable rate than . . . 'what the traffic will bear.'* That does not mean all that can be extorted or squeezed out of it, but what the traffic will bear having regard to the freest movement of commodities, the least possible burden on the producer and on the consumer. The middleman can take care of himself."
>
> Q. "How much importance should . . . be given to the factor of capitalization or the value of property in determining the reasonableness or unreasonableness of a rate?"
>
> A. "I think that is one of the factors, of course, and a very important one. So long as the railroads . . . are owned by private individuals, so long their return has got to be both safe and attractive. . . . The maker of the rate in the first instance must make the rate such as to permit the freest intercourse and the freest interchange of commodities, regardless of capital, regardless of cost—almost regardless of cost, but entirely regardless of capital. . . . When it comes to limiting rates by law, it is another proposition. Then you have got to consider cost, interest on capital, and everything else. . . . In dealing with these complex commercial propositions the maker of the rate must discard to a very large extent the question of the return on capital, because he has got to make a vast number of rates which he knows that, of and by themselves, are unprofitable, and a vast number of rates that, applied to any considerable portion of his business, would bankrupt him."

It is obvious from this that Mr. Ripley refers here only to a small minority of all his rates. No sane person expects a railroad-president to testify that his *average* rate is made such that the road's aggregate return is "almost regardless of cost" and "entirely regardless of capital." All that he means is that, for the purposes of commercial competition, or warfare, rates must be wielded as weapons, here and there, regardless in any one particular rate of the considerations mentioned. It is unfortunate that he was not examined further in this respect.

> Q. "Do I understand you . . . that different rules should govern the ratemaker for a railroad than should govern the Interstate Commerce Commission when they try to fix a rate or pass upon the reasonableness of a rate?"
>
> A. "Not in the least."
>
> Q. "You think the same rules should govern each?"
>
> A. "Absolutely. . . . I think they should consider the value of the service first, and leave the question of the cost and the valuation of the properties to altogether secondary consideration."
>
> Q. "You are speaking now of the value of the service to the shipper, as distinguished from the value of the service as a concrete fact?"
>
> A. "I am. . . . What is the value of the service we are rendering to the shipper? Incidentally that value has necessarily been enhanced by increased expenses and increased wages, by increased valuation, by incomplete and inadequate returns upon capital. These are all factors, but *the prime factor is what is it worth to the shipper.*" (Italics mine.)

Yet this is the basis for rates which the Supreme Court plainly ruled out—appreciating, with an acumen not enjoyed by the roads, that its retention would lead not only immediately to injustices to the shipper of the grossest sort, but *ultimately to an undermining of the railroad's entire claim to what it now regards as its property.* In his last paragraph, as in his earlier specific statement, President Ripley has revealed squarely the fact that the sole basis for railroad-rates is "charging all the traffic will bear," to a suppression of traffic far below its natural maximum.

The whole weight of this treatise is to be thrown into counterbalance against this general position that the surplus belongs to the commercialist, and that rates should be the maximum which the Consumer will consent to pay. The sole consideration in industry, in making rates, should be the *natural, factory-system cost.* If then it is believed that some one industry, such as education for instance, ought to be encouraged at the expense of other industries, this should be accomplished by a frank transfer of money, as a subsidy, rather than by endowing, or by charging either more or less than the natural cost of the service, according to some mysterious set of rules having nothing to do with the equities.

Mr. Ripley's position as to the original question of this discussion, whether it is right to charge the shipper interest upon a surplus which has been created from his own current payments, is revealed thus:

> Q. "Therefore, if any carrier in the past has collected more than what would be termed a reasonable return upon the investment, and he re-invested those unreasonable returns in the property, would you expect the company to earn a dividend from those investments?"
>
> A. "I do not think there is any such instance on record. I do not know of anything of that kind."

Yet on page 121 President Ripley says:

> "In 14½ years there has been paid in bond-interest $134,000,000; dividends, $112,000,000; fuel-reserve [sinking-fund for coal-properties], $2,500,000; discount on bonds [sold below par], $8,750,000; additions and betterments, $30,300,000; remainder $24,250,000, which stands on our books as a surplus but which is not a cash surplus, *being all invested in the property*." (Italics mine.)

Therefore his statement that he knew of no such an instance must have been based upon some technical objection to the form of the question, since his own road follows that practice.

Again (page 117) he expresses the opinion that depreciation should be made good out of operating expenses, but that improvements should be paid for by issue of securities. But we have already seen that physical depreciation of an appliance on the cost of which securities have once been issued, should, in equity, appear in a corresponding depreciation of those securities. Wherefore, if the depreciation is made good out of earnings, some increasing fraction of those securities represents, not the original appliance, but the earnings expended in keeping them up. As Mr. Blauvelt states so plainly, it makes no difference just what particular source of the road's wealth goes to any particular destination; the public pays for the whole thing in any event.

Commercial "Costs."—In evidence of the usual complete disregard even of such distinctions as Mr. Park tried to define—as to betterments which did or did not increase the earning power—Mr. Ripley's testimony as to the Kansas City Union Depot may be cited, to show that *securities bearing interest are issued wherever and whenever the public can be persuaded to absorb them, with no regard to the character of their nominal basis.* For (he stated) thirty millions of bonds were issued against the Union Depot mentioned, whereas the structure itself cost only three millions; while, according to Mr. Ripley, its practical equivalent could have been built for perhaps $100,000, or at most, $200,000—one thirtieth of that sum!

If the Kansas City Union Depot had been permitted to cost only $100,000 then the railroad-capitalists would have been able to collect interest from the Ultimate Consumer upon only that sum. But since the depot was made to cost three millions, the capitalists then enjoyed interest upon that larger sum, thirty times as great. That's easy!

What difference does the cost make to the capitalist? *For both the first cost and the interest thereon are paid by the public.*

The capitalist never invests real money, in the sense of wages received for past production. He supplies nothing but the nerve requisite for collecting credit from the Ultimate Consumer, and then invests that. He pays those who build his railways and other plant, in effect, with artificial, privately issued paper-money (credit-securities printed by private authority, and accepted by the banks as collateral for the loan of real money) the valuation of which securities has been imparted to them *solely by the public's demonstrated ability to pay six per cent thereon, under duress of taxation without representation, sneaking under the disguise of high rates or prices which are sworn to be "reasonable."*

The True Equities of Commercial Ownership.—If all this be so, then the act of passing a dollar across a shop-counter or ticket-shelf can no longer be regarded as an act of free contract, nor the seller as an agent irresponsible to the Consumer. If the part of this dollar which goes to form surplus still rightfully belongs to the Consumer, because he got no service for it, then *any other portion of it for which he may receive no service belongs to him.*

This criterion applies directly to all interest and dividends, which go to the stockholders; also to all costs of competition, which net nobody anything. The Consumer's rights plainly follow his dollar into the till, and beyond, until he has had a public accounting of its expenditure to the last cent. Given once this relentless criterion of service rendered in return, as measured by the factory-system, and the title to every dollar of commercial property is thrown wide open for argument.

The True Origin of All Capitalism.—For, as repeatedly explained above, it is the Ultimate Consumer who alone furnishes all the wages and salaries paid by the capitalist-employer, who buys all the raw materials used, and who pays all the rent, interest, dividends and profits. Now it becomes plain that it is also the Ultimate Consumer alone who accumulates for the capitalist his surplus, which the latter re-invests under his own name—and who "absorbs" (or gives valuation-in-exchange to) all the paper securities with which the capitalist may elect to burden any enterprise—by his payment of tribute thereon in the form of interest and dividends. Hence the reader must now be ready for the crowning statement of modern economics, namely, that *it is the Ultimate Consumer alone who furnishes all the capitalism of the commercial world!*

In interpreting this statement it must not be forgotten that the capitalists are human, and are therefore themselves Ultimate Consumers. What is said here is that *it is only in their function of Consumers that they supply any capitalism,* and not in their function of capitalists.

Or again, that while, in their function as commercialists, they have been acquiring inequitable title to all this commercial property, they have simultaneously abandoned and lost what seems to the author an inconceivably more valuable equity, namely, their title, in their function of Ultimate Consumer, to their proper interest in *every other commercial property in the land than their own!* (See page 730.)

That is to say, in their commercial, as contrasted with their consuming, acts, our commercialists are pan-German, annexationist Prussians of the most efficient type; for every existing dollar's worth of paper-title to commercial property in railroads, mills, factories, warehouses, dwellings, department-stores and petty retail shops alike, has all been built up, as the decades passed, by this gradual but forcible annexation of the Ultimate Consumer's surplus—the surplus over all natural, actual or even commercial return in commodities or service—in the name of and as the property of the seller.

The Principles Underlying Price-making.—The crucial question already up before the Interstate Commerce Commission,[4] and soon to monopolize public attention, is: *What is the guiding principle of equity under which railroad-rates and all other prices are determined?* But as to this question the student will get no clarifying reply from either the professional teachers of economics nor from the leading commercialists. The best from both sources which the author has been able to discover has been quoted in this chapter, and in the earlier chapter upon Credit.

The cross-examination of the commercialists before the Commerce Commission did not net any useful idea, not because the lawyers did not perceive vaguely that the stockholders could not hold equitable title to the surplus, but because they were afraid to accept, or afraid that the court would perceive, the conclusions unavoidable from any such a position, namely, that *the title to all commercial property was thrown into doubt the instant any such a question of equity as that were urged home.*

It is merely because we are afraid of this horn of the dilemma that commercialism is now being permitted to walk away with our purses, bodies, souls and civilization, possibly to drop them all finally into the seething pit of world-revolution. Fear is the eternal breeder of trouble.

The student will nowhere find any arbitrary rule, nor any statement of natural law, for the determination of prices, which can permanently withstand cross-examination, until he accepts the rule of crass tribute-by-force which has been stated here. This is that the commercialist always charges far above the natural, factory-system cost, elevating his price persistently until the traffic has been charged, *not* all which the traffic itself will bear—because the instant the commercialist takes hold the traffic is depressed far below normal—but all which the commercialist's

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[4] Written before we entered the World War, and therefore some three years before President Wilson instituted his campaign of 1919 against the high cost of living.

profits will bear. The rule, to be frank and scientifically correct, should read: Charge all which the profits will bear.

Any insistence by the student upon a foundation for rates or prices based upon equity causes the whole structure of commercialistic philosophy to fall to the ground in a tangle of inconsistencies. The only consistent statement from the side of the commercialists appears in Mr. Ripley's frank admission that the real grounds for the railroads' demands for higher rates were that *they "needed the money!"* Also that, if they did not get the money with which to pay fancy dividends upon surplus belonging in equity to the shipper, *the opportunities for investment in Wall Street would be curtailed*—a catastrophe the imminence of which appals the general run of American people about as direly as would the prospect of a collapse of Prussian junkerism.

Passive and Active Capitalism.—Interest-bearing capitalism, in its pure form, rests solely upon the passive ownership of appliances needed by others. But much which is nominally interest is paid on capitalism which is not pure nor passive. In many cases the rate of interest-return depends much more upon the active promotion of the enterprise by the chief investors than it does upon mere passive ownership. To that degree, therefore, the capitalism should be classed as an active one.

In active capitalism the passive ownership is mingled with active promotion. Sometimes this intermingling occurs within the individual. Sometimes, as is usually the case with corporations, the active promotion is carried on by individuals other than the passive investors, and its reward is distributed in the form of salaries or commissions.

Speaking accurately, activity in promotion begets entropits, and not salary nor interest. But since the two functions are often found merged, in actual business-life, the rewards being lumped under the term dividends, it is sometimes necessary to recognize the latter term as loosely including both.

Risk is another element in the apparent rate of interest or dividends which operates in the same way, to develop a rate higher than that earned by mere passive, safe investment. But since the risk is itself a result of commercial combat on the part of others, just as promotion consists of commercial combat on the part of the investor himself, no broad distinction need be drawn here.

Purely passive investment, earning pure interest, is in economics what the leech, the air-plant or the non-malignant tumor is in biology—a parasitical burden, a source of deficit and debility, but not an active, malicious enemy of life. Active capitalism, on the other hand, earning dividends or profits, is in economics what the lion, the locust or the virulent microbe is in biology—an invading enemy, which will kill if it be not killed.

In active capitalism the "owner" may use the surplus at his command either to purchase directly, or as an indirect aid to secure by his own exertion, *control of the processes of interchange.* He may do this in a thousand apparently different ways, but all are of the same essence. He may "buy out a business," not merely in the sense of acquiring its tangible appliances, but chiefly in securing its established channels of trade, or its "good will"—its organization of salesmen, its mailing-lists, its clientele of regular customers, etc. Or he may use his money to build up the selling-organization of a new business created by some invention, or started on nothing at all—prosecuted against that antagonism which is always evinced toward any intruder into the commercial world, by those well established, no matter how valuable to society that new business may be.

Or he may observe some field of interchange to be less compactly crowded than usual with contending aspirants for the privilege of conducting trade; which means that he sees only nine such competitors, say, stepping on each other to do what one alone could do far better and more cheaply for the Consumer, were he freed from economic combat with the rest of them—and that he judges that a tenth fighter might stand some chance of securing a dribble of the whole. He may do this upon the scale of a corner-grocery, or a news-stand, or a sugar-refinery, or a railway-system, or a bank. He may act, in connection with it, as a small proprietor, himself doing much of the work, or as a hundred-thousand-a-year president, or as a commercial traveler, or as a promoter, or a stock-broker, or a jobber of drygoods, or as a newsboy fighting with his mates for his share of the sidewalk.

These are all instances of unfactorylike lack of law, order and discipline, ruining the efficiency of supply, where any businessman—once given by society full authority over the whole field, but on a salary, and sworn to a chastity against private profits as any judge is sworn—would promptly substitute factory-methods of non-owning monoply and would exclude all possibility of private investment. The author challenges any businessman to deny that, if he were employed upon an adequate salary to conduct all the trade of the land in his own line, protected in an absolute monopoly, yet not allowed to make profits—freed from the worries of competition, enjoying supplies brought to him in the same efficient manner, and employing labor fed in the same equitable way—he would not prefer it personally, would not be able to give cheaper, better standardized service than now, and would not find opportunity and motive for more rapid progress than now.

Professor Fisher's Theory of Interest.—The foregoing deals with theories of interest which are more or less those of the man-in-the-street, although they often crop out in university-circles. Attention should now be turned to the more technical theories of the professional economists.

The only one of these to be debated here is that of Professor Irving Fisher, of Yale. This is because Fisher's book, "The Rate of Interest" (1907), reviews all earlier theories and then builds upon them. Fisher selects as his foundation Böhm-Bawerk's theory, as published in the latter's "Capital and Interest" (1890) and "Recent Literature on Interest" (1903), because "it has become widely accepted." For the same reason, and because they represent a most careful sifting of all earlier theories, Fisher's views must be accepted as the best attainable summary of the professional commercial theories of interest.

Professor Fisher says (page 53):

> "Böhm-Bawerk's theory finds the essence of the rate of interest in the agio or premium on present goods when exchanged for future goods. This theory is in the main accepted by the writer as the natural and proper starting-point for any rational discussion of the subject."

And the opening lines of his book read:

> "If the theory to be presented in this book be correct, the rate of interest in any community is an index of the preference,

> in that community, for a dollar of present over a dollar of future income."

This theory, while elaborated and repeated throughout the book, is nowhere more directly stated than in these quotations.

Attack upon the Fisher theory, therefore, is not alone to be directed against its conclusions, but against its premises. For this mere preference on the part of the borrower for present rather than future money is but a superficial fact, and not a "proper starting-point" at all. It is superficial in that it applies not to society as a whole, but to the borrowers only. It is superficial in that it fails to recognize the borrower as the mere agent—and the unauthorized agent—of the Consumer, charging against the latter every dollar of interest paid (with a margin added) and collecting it across the shop-counter without the Consumer's knowledge or valid consent.

It is most superficial of all, too, in its failure to recognize that the bulk of all modern interest-bearing debts are contracted not at all by the borrower, but *by the lender.* It is not the Ultimate Consumers, who are the only ones who pay interest—and who are therefore the only ones who really do all the borrowing done—but the capitalists, who insist zealously upon the privilege of lending credit and drawing interest thereon. Their highly paid agents argue earnestly before every public commission in favor of ever widening the existing "opportunities for investment." Every bank is an active agency for communication with investing individuals, and the distribution to them of these opportunities for investment. Every drummer and advertisement is, in effect, foisted upon the people for the ultimate purpose of increasing the people's burden of interest-bearing "investments."

The capitalists everywhere insist upon lending, and *will not consent to be paid off and depart.* Every maturing security is always refunded in larger amount. It is those corporations which carry the largest interest-bearing debt which amass the largest fortunes. There is not the slightest evidence anywhere in the commercial world that the capitalist prefers present to future payments, in the sense urged by Professor Fisher. If he did, the continual maturing of these debts must be steadily decreasing their aggregate volume. But the facts are exactly the opposite from this.

All of the theories of interest which partake of these premises of Professor Fisher are even more broadly superficial, in that they close their eyes deliberately to any comparison of the interest-bearing plan with the non-interest-bearing, or factory-system, plan which everywhere stares us in the face. *Fisher assumes crassly that there is no other way for capital to be made available than by an interest-bearing bargain between a capitalist-owner of that capital and a borrower.*

But certainly our universities owe us a more full and frank debate of alternatives than this. Since the largest current volume of loans, and those most effective for the good of society, are the non-interest-bearing requisitions of our vast factory-system, they should at least receive consideration beside the interest-bearing loans of the financial field. Since the universities are themselves organized upon the factory-system—maintaining a huge plant and pay-roll, and performing a most important public supply, yet quite without profits, interest, dividends, drummers, etc., extending credit to their own employees in large sums, in the form of buildings, laboratories and instruments entrusted to their use, without interest-charges—this omission from their discussion of the nature of interest is doubly bad taste.

Yet, in a book which is accredited with having codified and condensed all the theories of interest, and with having skimmed therefrom the cream of the truth, by one of our most prominent university-authorities upon economics, *there is no mention at all of this vast portion of our credit-system which pays no interest.*

Fisher's theory is now enjoying great vogue among commercially orthodox (and that usually means university) circles, for the same reason that Malthus doctrine of "diminishing returns" and "surplus population" did a century ago, namely, because of its support of the special privileges of the rich in a self-righteousness which very much needed to be bolstered. But the Malthusian doctrine has now become completely discredited, as being a half-truth only, without shattering those special privileges. Indeed, they have grown in the interim. Wherefore a competent refutation of the Fisher theory of interest must not be expected to abolish interest.

Who Loans, and Who Pays Interest?—It is bootless to reply to the above that every appliance in the factory bears interest-charges, and that the university lives upon these charges collected from other factories than itself. We know too well the truth of this. But, in the first place, if a university operates well without interest-charges against its patrons, why will not every other factory? Or, if the other factories are warranted in charging interest because they must support the university, then why does not the university get *all* of their collections of interest?

The commercial enterprises outside pay the universities the interest upon their endowments only by deliberately charging the Consumer *more* than the natural cost for what is supplied, passing over to the universities a small fraction of the margin thus collected. The universities need this income only because they deliberately charge the Consumer of education *less* than its natural cost. But neither policy is inevitable.

The deplorable consequences resulting from this indirect, unnatural and inconsistent method of deriving support for both universities and factories—from their sole source of support, the Ultimate Consumer—will be debated in a later chapter dealing with educational problems. The sole point at present is that the two diametrically contrasted systems—the profit-seeking, interest-bearing system and the non-profit-seeking, interest-receiving system—exist side by side. Both of them have been in successful operation for generations. Any discussion of interest which omits one of the two entirely from mention is incomplete, biased, unscientific and unscholarly to the last degree.

Any sweeping doctrine that either of them is impracticable is absurd. Any statement that one system is fitted only for one duty, and the other for the other, must be scrutinized most carefully; for the author knows of no line of demarkation between these two systems which aligns itself consistently or permanently with anything. History shows that one or the other prevails, at any given point or time, only by haphazard chance, uncorroborated by even a pretense of deliberate reasoning in the selection.

The important answer to all this confusion of ideas as to interest or non-interest is that *the appliance within the commercially owned factory bears interest only against the Ultimate Consumer. Whether the appliance be located in an interest-paying factory or a non-interest-paying university, it bears no* *interest against the man who uses it. The man who uses it neither owns, borrows, nor pays interest.*

As soon as the fact shall have become generally recognized that the user is merely the agent of the Ultimate Consumer, then it will be equally recognized that neither ownership, nor borrowing, nor interest-payments are necessary anywhere in our economic system, whether in the supply of food, clothing, education or what not.

Professor Fisher's nearest approach to a recognition of this broad question runs as follows (page 41 of his book):

> "Socialists would cease to think that interest is extortion if they would try the experiment of sending a colony of laborers into the unreclaimed lands of the West, letting them develop and irrigate those lands, and build railways upon them, unaided by borrowed capital. The colonists would find that interest had not disappeared by any means, but that by waiting they had themselves reaped the benefit of it. They would need to wait, let us say, five years before their railway was completed. At the end of that time they would own every cent of its earnings, and no 'capitalist' could be accused of robbing them of it. But they would find that, in spite of themselves, they had now become capitalists, and that they had become so by stinting for those five years, instead of receiving in advance, in the shape of food, clothing and other real income, the discounted value of the railroad. This example was almost literally realized in the case of the Morman settlement of Utah."

This is a pertinent illustration. It should be examined carefully.

First, does Professor Fisher really dare to suggest that it is the capitalists of the world who are characterized by devotion to "stinting" themselves, while it is those Ultimate Consumers who pay interest without receiving it, who indulge? Of all the ancient and untenable theories of interest this, we thought, was the first to hide its absurdity from the glare of obvious facts.

Yet it is true, of course, that the community as a whole must defer its enjoyment of the capital invested in the road until it may begin to bear fruit. That is inevitable. But this is a very different proposition from the multiplication of the inevitable burden of stinting upon the many, in order that the few called capitalists may be relieved from all burden of stinting, which is the interest-paying plan.

Factory-System Capital for Extensions.—But does the building of the road really involve any perceptible stinting? Is there no way of incurring this burden so gradually, and of distributing it among all, so that the average stinting would become imperceptible at the start, and would cease as soon as the road became productive?

The factory-system gives the answer. The colonists have only to co-operate, in the building of the railways, in the manner now standardized within every factory, in order to so distribute the stinting as to annul its resent odious disparity. They have only to build gradually, so that each facility aids the building of the next, in order to reduce the aggregate stinting at any one time to an imperceptible fraction of the whole effort of society.

This, indeed, was the plan followed by the Mormons. They did not follow the capitalistic system, where the many pay interest to the few. They followed the factory-system instead, as Professor Fisher suggests. They all stinted together. And in the end, had they remained uncontaminated by the commercial world outside, their plan of stinting would have ended naturally in communism, not in capitalism, so far as the railway was concerned.

Our actual society, *when considered as a whole,* has always followed this gradual plan in the past. Each innovation is, in fact, but a microscopic excresence from the world of existing appliances. But it has suited the profits of the commercialists, and the prejudices of their apologists, to assume that things are otherwise—to assume that each new facility must be created from a world devoid of facilities, or in a world in which each old facility is debarred from helping each new one. For otherwise the illustration adduced by Professor Fisher becomes sheer nonsense.

For under a complete national factory-system the community's entire stock of rails, ties, beans, etc., would belong to the community of Ultimate Consumers. This property-right would have been acquired when the producer, as he made these things, had been paid in cash, in the form of wages. This, indeed, is the process now actually occurring daily, except that the commercialist now steps in between Ultimate Consumer and producer, passes a part of the Consumer's cash to the producer, keeps the rest himself, and incidentally retains legal title to the surplus and the appliances.

Whatever may be the system, the decision of the community to build a road or other facility necessarily calls for a withdrawal of some of this stock from current use. This, in the factory-system, is done by mere requisition. Whatever may be the system, the effect of any such a withdrawal of stock from current consumption is necessarily to decrease slightly, for the time, the purchasing-power of every dollar in the land. So far as the building of the road necessitates such withdrawal, this stinting in the form of decreased purchasing-power must continue until the road has become operative and productive.

But the real stinting, it must be remembered, was incurred when the stock was manufactured, withdrawn from current consumption, and accumulated as stock, before the road had been decided upon. There is no sign that the mere decision to devote this stock to some specified aim constitutes a conscious burden upon the community—under a natural system, at least.

Further—and this must particularly be kept in mind—all this accumulation of tangible stock against the need for extensions, and the resultant stinting of the purchasing-power of the Consumer's dollar, *actually occurs to-day, just as if we had a pure and complete factory-system, without any parasitical commercial system superimposed thereon.* The cost of our extensions of facilities, like that of our current supplies, is made up of the inevitable, natural, factory-system cost *plus* the superimposed costs of commercial ownership-in-industry.

In other words, the people are now already performing all the stinting naturally incidental to the construction of all the temporarily unproductive enterprises now currently undertaken, and, in addition thereto, are bearing the much heavier burden of stinting due to the imposition of capitalistic tribute, on top of the inevitable temporary unproductivity. The existence of the former is no excuse for the imposition of the latter, in addition. The presence of the latter does not relieve the people from the former. Since the people now bear both, they certainly would be better able to bear the first alone.

Finally, under a complete, national factory-system, as soon as the road had become productive, then its effect would be to elevate automatically the purchasing-power of every dollar in the land, well above where it was before the enterprise was undertaken. Considering the large number of new enterprises continually maturing, each of them an off-shoot, in effect, of some established productive enterprise, there would be no real nor conscious stinting anywhere. *The expansion of facilities, viewed as a unitary, national process, is a continuous and a continually profitable enterprise.*

But to-day, under the existing commercial system, the purchasing-power of the dollar is actually being decreased by the construction of each new road or factory. That is the explanation of the world-tide of discontent. This is so not at all because of the temporary unproductiveness of such enterprise during construction, but *because of the permanent and cumulative burden of interest-charges which commercialism attaches gratuitiously thereto, which began before the first surveyor's line was run, which grows (rather than decreases) with the profitableness of the road, and which continues for generations after the last rail and car (of the date when the road first became productive) has worn and rotted into dust!*

The commercial system goes far out of its way to regard each new extension—which is in reality merely an imperceptible expansion of that vast unitary productive system which has long supported the life of the people, and which that life supports—as a matter independent of the rest of the productive system, and as belonging to some group of capitalists. It is because of this policy, and not at all from any inevitable temporary unproductiveness, that the extension of our facilities now stands as a continually increasing burden imposed most inequitably—doubling the stinting of those who must stint anyhow, and doubling the luxury of those who never stint, yet who are being paid enormous sums as balm for a self-sacrifice which they never make—as balm, according to Professor Fisher, for a delay in enjoyment which they never incur.

Pioneering under Commercialism.—Thus we decline to admit that a band of pioneers penetrating a virgin wilderness, and developing it with no accumulation of helpful appliances already in their hands, is any proper simile for the guidance of a long settled and intricately organized community, such as this nation has now been for a generation at least—rich in the daily enjoyment of the fertility of a vast mass of technical appliances, all created by wage or salary-paid men, in shop, laboratory and scientific school, with the aid of which all further extensions may and must be accomplished.

Yet, even so, the Mormons might have asked themselves most pertinently: Shall we all stint together equally for five years or so, until our work may have borne fruit? Or shall we borrow of this richest Mormon, stint harder than ever while he luxuriates upon our interest-payments, *and then continue to stint indefinitely thereafter, in order to pay him interest upon a steadily increasing debt, the principal of which he will not allow us to repay, nor even to keep from expanding, although the railroad may long since have become fruitful?*

So far as the author is aware, the Mormons did ask themselves just this question between communism and commercialism, and did decide unwaveringly against commercialism—although they were unable to continue the policy later, in the face of an overwhelming national tide of commercialism all about them. The agreement of the Mormons to stint all together brought the productive stage of their appliances into usefulness for each citizen as soon as it was physically possible for the appliance to produce at all. But, had they adopted the commercial plan instead, the bulk of the community, even three or four generations after their settlement of the wilderness, would still be hopelessly stinting all the life-traffic would bear—*contending against a dearth of all appliances, so far as usefulness to them was concerned, as desolate and discouraging as when their ancestors first trod the primeval forest.*

Therefore Professor Fisher's illustration proves conclusively only one thing, and that is that he has no comprehension whatever of the modern phenomenon of interest; for his imaginary band of pioneers, all stinting together for five years while the road is unproductive, in order that they may later enjoy indefinitely together, *has not a single feature in common with modern commercial capitalizations and interest-payments.*

Commercialism versus Wilderness as an Obstacle.—In this fact of the choice between starvation or interest-payment, which commercialism now imposes upon us, lies one of the heaviest indictments against commercialism—one of the many evidences that it holds back, rather than promotes, progress. For Professor Fisher's own philosophy shows that, *under commercialism,* the position of the great mass of citizens is one of a deprivation of access to all the helpful appliances of modern technology which is *only barely better than having no appliances whatever, until, after a generation of effort, they might create them themselves!*

It is both the policy and the proud accomplishment of capitalism that it charges progress, as well as current life, all which the traffic will bear. It avowedly (now that Professor Fisher has spoken) holds progress back to that minor fraction of the rate naturally potential which will still bring to it its maximum tribute, just as it holds back the current consumption of flour and every other commodity to the same minimum.

Actually, for most of us, life to-day is even more discouraging than this; because the grandeur and freedom of the wilderness is gone, while the unattainable luxury of the rich increasingly taunts and mocks us. If this were not so, human contentedness would be stationary.

It is common knowledge that it is decreasing, the world over. Traffic has everywhere been charged a little more than it can bear. The stress gradually approaches the limit of elastic endurance.

Present Inequity of Capitalism.—For the inequity embodied in the origin of capitalism, however its protagonists may explain the wrong, gives us only a faint grasp of its later growth—for, as Billy Sunday says: "All sins have dimples and blue eyes when they are young." It is only in its later developments, after enterprises whose temporary, infantile unproductivity gave excuse for the birth of capitalism have become amazingly productive, that its inequities become striking in magnitude, however obscured by intricacy of organization. It is only then that the contrast between the factory-system and the commercial methods of extending our appliances becomes visible in two points of superior equity attaching to the former, namely:

1. Under the assumption of a nationally complete factory-system, the burden due to the temporary unproductiveness of each enterprise will have ceased when the latter has become productive. From that time forward the entire community is enriched thereby, not through dividends, but through the *reduced cost of living* due to the service of the appliance without the exaction of dividends. Except in this respect the community has no consciousness of the new appliance's presence.

2. Every baby born into the community, whatever the circumstances of its parentage, has presented to it by the entire

adult community all the legitimate fruits of ownership in the road, namely, *reduced cost of living.* No newcomer, rich or poor, babe or aged, native or immigrant, would then ever be forced to pay any "agio or premium" to somebody for the latter's kindness in deferring the enjoyment of their wealth until some property which has long been productive shall have become productive—which is the sort of a niggardly hold-up extended as a welcome to every fresh arrival to-day.

Submarine Economics.—No; capitalism is not the fruit of an advantage gained by the thrifty against the unthrifty, but by unscrupulous strength against weakness, by maturity against adolescence, by adults against babes. The sneaking German U-boat baby-killers are not one whit worse, except that they are more conscious of what they do, than are the businessmen who, working with concealed ledgers and disguised lines of influence, operate beneath the surface to put up prices against the Ultimate Consumer—ignorant and reckless of whether they thereby hit a commercial combatant amongst their own peers, or the weakest and most innocent in the land.

For let them know forever after reading these words that the only thing certain about their indiscriminate, mine-sowing, commercial warfare is that they are sure to hit *all grades and classes of Consumer,* the weakest and most innocent with the strongest—and they hit the weakest the hardest. Amongst the crowded millions, pitifully massed, into which they are firing their commercial shrapnel, there are a thousand weaker than they to one man of their own class.

This picture is literally true. Babies are continually dying, school-children are daily failing in their education, boys are drifting into "dope-fiends" and girls becoming "missing" by the thousands per month, merely through malnutrition, both of body and mind, and through the continual deficit in employment, due to *high prices.* No reader may lay any claim to an understanding of modern civilization who has failed to realize how our modern American autocracy of military commercialism has been built up by the relatively stronger of the land against its weakest—against the babes, the widows, the youth lacking opportunity, the aged lacking shelter, the non-commercial lovers of art, craft or science (all of whom instinctively dislike conflict), and those born deficient. For all are Ultimate Consumers. All must pay daily homage at the shop-counter.

Foresight and Commercialism.—Professor Fisher forgets that the commercial, interest-bearing plan offers marked contrast, even in more general ways, with that which he suggests for the Mormons. In the first place, it is not the community, under commercialism, which decides that a new railroad or the like is needed. *It is a group of capitalists.*

It is true that there must exist a natural, if latent, need for the road, else it could not pay. But the all-important element here lost to sight is that *it would be an inconceivable gain in that solidarity which alone constitutes civilization if the community were left by the capitalists without a road, until the need had become so great that the community was forced to act as a unit in obtaining one.*

It is the foresight of the capitalists in anticipating the community's needs which is commonly urged as warrant for their huge returns. But foresight alone does not deserve either credit or cash. It is the method of its use. If used to aid mankind it is a credit; but if used for selfish advantage it is a shame.

The civilized world has always taken for granted, for instance, in regard to foresight in connection with medical, surgical and scientific discoveries, that they must, in honor and decency, be disclosed for the good of society, without the slightest attempt by the discoverer at the reservation of proprietary control or pecuniary reward. The person making any such an attempt is promptly ostracized, by profession and public alike. Why, then, should we deem it so essential that effort in organizing industry, with foresight as to human needs, must be promised huge proprietary returns, else it will not assert itself?

Society to-day needs industrial organization of the Ultimate Consumers to secure low prices far more than it needs cancer-cures or tuberculosis serums. Why cannot those who are able to organize the people be willing to work for the good of society, plus that meager pecuniary reward which (so they assure the scientists) is ample basis for scientific happiness?

Proprietary Rewards and Progress.—Indeed, the whole profession of medicine, etc., stands as a reassurance to us in our vain worryings over "human nature," with its alleged perverse refusals to do what is right unless rewarded with what is obviously wrong. For in medicine, *out of that whole branch of the science which subsists upon proprietary rewards—patent medicine—there has come not a single item of permanent value* *to mankind,* as judged by mature, unbiased experience after the patents have expired.

The whole business in patent medicines, like that in most of the needlessly numerous brands of all sorts of commercial nostrums, is kept alive only by a continuous hoodwinking of the people, through costly advertising. Not only is a patent medicine dropped by the public as soon as its advertising ceases, but it is an axiom in this trade that it does not pay even to keep a remedy alive by advertising it, longer than a few months or years. Its aid to mankind is so imaginary that after a short time not even advertising can sell it.

Conversely, and directly in denial of that most widespread of all modern superstitions—that superstition to the effect that human beings will do nothing except as hired thereto by exaggerated pecuniary reward—there stares us in the face the one most striking fact concerning relative advance in medicine and other lines of human progress. This is that *that one field of effort—purely scientific medicine and surgery—which is denied all hope of proprietary reward, or even decent income, has accomplished the most striking progress in the relief of human suffering of any of the many lines of human effort.* No branch of human knowledge, and least of all those induced by the highest rewards offered by commercialism, has ever made anything like the advance evinced by medicine and surgery, both curative and preventive.

Indeed, preventive medicine and hygiene is one of those peculiar branches of science wherein effective effort cuts off automatically even what little reward commercialism has normally left to these scientists, in that it decreases disease, and therefore the demand for the service of the physician. Yet this branch of medicine has made more rapid strides than any other!

This whole book's indictment against commercialism may thus be condensed within the statement that the latter's sovereignty over our life has reduced our civilization, in its efficacy for health and happiness, and in its standards of dignity and taste, to the level of the patent-medicine world. There, both in the sale of proprietary remedies and in commercialism, egotistical personalities intrude their names and faces at every turn, to burden us with nostrums without which we were better off. The contrast between this policy and the dignity and worth of the medical profession is exactly the contrast we are trying to draw between our present crude civilization, guided by its sordid quest for private profits, and what it will become immediately upon the extension of the factory-system to include all citizens and all functions.

The commercialists, who four generations ago were excluded everywhere from decent society, and whose philosophy and policy (when once its effects are understood) classes them to-day with the promoters of patent-medicine profits, need hope for no sympathetic ear for their complaints when they shall have been forced to bunk in with the intellectual and artistic classes of society, in pay. By the change they will have acquired a dignity which to-day they cannot even understand.

The Crude Blunder of 1840.—It was our false choice in 1840 between these two standards of ethics, economics and form of organization which formed the gigantic mistake made by America, in facing her pioneer-problems, when failing state-enterprise was replaced by the nationwide policy of private ownership, for indefinite profits, as "the easiest way." The crudity of those times and the glittering rewards then promised for the prompt conquest of natural obstacles, which dazzled the young nation, form ample excuse for the loss of this inestimable opportunity for development of the communal spirit. Nevertheless, it would have been far better if the construction of the canals and railroads should have awaited the community's first becoming fit, *not by talk but by need,* for enjoying the fruits of its own labor. But evolution never proceeds so smoothly and comfortably as that.

Economic Patriotism.—Then the capitalists must recognize that, not only are they under heavy patriotic responsibility to guide the community into a united, efficient, nationwide factory-system, but that *the people's present gropings in that direction, in its childish attempts at public enterprise, are abortive only because these big and able men systematically withhold their sympathy and aid, contributing instead only sneers at the apparent failure of public initiative!*

What, it may well be asked, would now be America's position in the world's esteem and her own self-respect (to say nothing of her stability as a nation) had she, because the stronger nation and the more remote from stress, adopted toward France's inability to stop the Hun that same attitude of contemptuous aloofness which our large men of affairs now maintain toward this nation's present awkward, incompetent strivings at self-defense against *rising prices?* Yet the rising prices and other features of commercialism constitute a far more insidious, unscrupulous and powerful enemy of American stability than German militarism ever had a long chance of being.

Commercialism vs. Socialism.—Let us now consider Professor Fisher's theory of interest in its relation to socialistic thories. Probably the best statement of this is found in a full-page article in the New York *Times* for Oct. 30, 1910. The whole tenor of his article may be found in the following quotation:

> "Interest is, as it were, impatience crystallized into a market-rate. . . . A socialist laboring-man once did some work for me. When the time came to pay him we fell into a discussion, during which he informed me that interest-taking was wrong, that any lender ought to be content with the return only of his principal, without interest. Thereupon I asked him if he were willing to lend me without interest for twenty years the $25 which I owed him; in other words, to wait twenty years for his pay. To this he answered very simply that, being a poor man, he could not afford to wait. I then offered to pay him, in case he would wait twenty years, not only the $25, but the interest upon it; but he said he would rather have his $25 at once than even $100 twenty years later. His answer revealed the essential fallacy in his philosophy, and led him to see that prepayment is a favor worth something to the laboring-man—a great deal in fact."

But the workman was asking for no "prepayment." He had done the work and created the value. It was properly his to enjoy immediately; and this was true even if he had been set to work upon something not to be immediately productive.

For the value was latent, even if not immediately tangible. The penalty of delayed joy due to this fact certainly rests upon him who assumes to decide upon the undertaking of speculative enterprises, or upon him who is to enjoy their later fruits, and not upon him who, as an underling, merely executes orders. Indeed, the whole philosophy of the commercialists toward the working-classes smacks altogether too much of the Hohenzollern disposition to set others to doing piracy for them, while they enjoy the spoils and cast the obloquy upon their catspaws, to find permanent favor in America.

Professor Fisher's workman was not learned enough to tell him what the professor of political economy should have known without being told, namely, that true economics, if not socialism, does not say that it is wrong to take interest, *but that it is wrong either to lend or to borrow for pecuniary gain, whether in the form of interest or profits*—that the great modern wrong is that society should ever allow anyone to be tempted either to lend for interest, or to borrow from necessity.

For any such a contract, *whatever may be the human natures upon either side,* is just as wrong, and works equal evil upon society, as do such forbidden contracts as slavery or prostitution. Professor Fisher should teach emphatically his every student that borrowing or lending at interest, like slavery or prostitution, always enslaves and paralyzes, in effect—not necessarily the individuals party to the contract, but always and grievously the Ultimate Consumer, albeit indirectly and obscurely—through an intricacy of commercial mechanism which, we are sorry to note, is quite incomprehensible to educated men, for all the light thrown upon it by Yale University.

In any rational or just economic society neither the Professor nor the workman would be free to debate the fate of the $25. The employer could then secure the man's services only through the Central Office of the district in which they lived, where every citizen would be registered, and his rate of pay, as determined by a law of supply and demand of which we now have little comprehension, recorded. Each day on which this man reported his willingness to work he would be credited on the books of the local community-bank with, say, two dollars, or any other sum befitting the prices of the time, on an account against which he could draw cash or write checks as in any bank to-day.

This would be done not necessarily because he had worked that day, but because he was alive, and a potential unit for production which society could not possibly afford to leave to any haphazard subsistence. He would be credited with the two dollars exactly as a mule is fed daily in its stall, whether it wears harness or not, *because it is crazy inefficiency to do otherwise.*

If twelve and one-half days of the man's time had been called for by Professor Fisher the $25 would be charged against the professor's account by the same bank, and at the same time, that it was credited to the man. *Neither the man nor the employer would be given the slightest opportunity to bargain over either the time or the fact of payment.* That is the way in which transfers of value between man and man are conducted in every factory in the land.

As to the rate of wages, that would be adjusted for each man, from time to time, by the law of supply and demand, based upon statistics drawn from tens of millions, and interpreted by a Central Office which neither handled any funds nor felt the slightest bias in the matter. It would feel no reluctance to raise wages, nor any inducement to raise prices. Every citizen in the land would then be inwardly conscious of this fact, in his every thought, just as everyone now knows that every employer is always under glittering inducement, and sometimes dire pressure, both to depress wages and to raise prices.

As to the balance of labor between trade and trade, if the Central Office finds less labor offering itself in any given line, at any established wage, than would supply the Consumer's demand for goods in that line, it will then raise both wages and prices in that line, to bring up the supply of labor and bring down the demand for it, until a balance has been re-established. But, in the interim, it would neither be so insane as to permit some free lance of a profiteer to enter the field, in duplication with the established organization, to supply at a profit the Consumer's unsatisfied demand; nor so stupid and cruel as to condemn the workman to idleness and penury, diminishing his productive efficiency, until, as is actually the case now, his sufferings had become sufficiently acute to prove that traffic had indeed been crowded more than human nature could bear—all as a penalty for a blunder in superintendence for which the workman cannot by any twist of argument be held responsible.

Similarly on the side of the employer. Industrial employers would then all be salaried, non-owning superintendents, and would have no inducement to depress wages, nor to debar labor from employment, except merely natural pride in keeping down prices to the Consumer; *and from this the laborer would gain exactly as much, to a penny, in his prime rôle of Ultimate Consumer as he lost in wages as a laborer.* It is unimaginable that any superintendent, under these conditions, would ever push either wages down or prices up, to the point of creating any such a general discontent with both as now prevails over the entire civilized world.

As to the fate of the $25 credited by the bank to the workman, that he may spend immediately or may save it against old age, just as he pleases. But, however long he may elect to let it remain in the bank, it will return to him, under the guarantee of the Treasury of the United States, just as he earned it—neither swollen by one penny of uncreated, unearned interest, nor diluted in purchasing-power by someone else's drafts of interest, nor shrunken by a penny's worth of undeserved bankruptcy due to "beared" securities.

The "Use" or Productivity Theory of Interest.—Another academic theory of interest (but one not supported by Fisher) is that based upon the idea that living capital, such as forests, orchards or cattle, has a natural rate of growth; and that inanimate capital, as an aid to labor, must possess an equal rate of interest with the animate, in order to maintain financial equilibrium. That is to say, capitalism will not invest in locomotives unless these machines develop wealth as rapidly, in connection with a given amount of labor, as if the investment were in growing sheep.

It is true, as the productivity-theory says, that financial equilibrium between animate and inanimate capital is always maintained. It is true, as Fisher says, that capital brings its returns only after delay. But it is not true that interest rests upon either of these facts.

Fisher's denials of the productivity-theory will be quoted here, not merely to disprove the productivity-theory, but also to upset Fisher's own conclusions, namely, that a denial of the productivity-theory throws one back upon the Fisher theory. The fact is that neither theory is true.

Fisher offers an illustration which is in essential a replica of his railroad case, but referring to animate capital. He says:

> "The capitalist is, as a matter of fact, always living on the product of past labor. . . . The capitalists of to-day are receiving compound interest upon the labor of yesterday. But it does not follow that any injustice has been done to the laborer. Let us revert to the case of the tree planted with

> $1 worth of labor, which 25 years later was worth $3. The socialist virtually asks, Why should not the laborer receive $3 instead of $1 for his work? The answer is that he may receive it, provided he will wait 25 years for the $3."

But this last statement we deny—top, root and branch. The standard tragedy of the economic world is the mass of faithful, productive toilers who wait patiently their twenty-five years, only to find, at the end of that time, that they do not receive even the $1 which they had originally earned!

But, overlooking this point for the moment—and also the doubt as to whether this is a fair statement of socialism—interest is justified in this illustration as the equivalent of the natural growth of a tree. The case is a parallel with that of the railroad in that the reward is deferred a period of years, during which time unproductive labor must be invested; but here, according to Fisher, the simile ends. The fact and the rate of interest, he says, is due to the *delay in fruition* and not to the character of the capital, whether naturally expansive or not. He sums up his whole chapter against the productivity theories as follows:

> "It is clear that although interest enters into the processes of nature, it is not because of their physical expansion, but because they require time. It is not because the seed grows into crops or the egg into a chick that there is interest, but because the crops or the chick are unavailable until a future time. . . . The conclusion . . . is that physical productivity, of itself, has no such direct relation to the rate of interest as usually ascribed to it; . . . It is, however, quite true that the productivity of capital does *affect* the rate of interest" (page 28; italics mine).

But if productivity "affects" the rate of interest then the productivity theory is partly true. That is to say, interest is the result partly of productivity and partly of something else. But this idea Fisher does not accept.

The Dependence of Capital-Valuations upon Income.—The idea which he would substitute for the productivity theory is based upon what he considers, and what the author also considers, the central fact of the question, namely: *The dependence of the valuation of capitalism upon the income which it is pos-*

sible to enforce through its means. This might be called the "tributary" theory of interest.

Fisher states repeatedly and emphatically that:

> "*Capital-value does not produce income-value.* On the contrary, income-value produces capital-value." (Page 13; italics his.)

He cites the illustration of an orchard. Its market-value does not depend upon the weight of apples produced, but upon their market-price. When apples rise in price the orchard, although still producing the same weight of fruit, becomes more valuable.

> "The paradox that, when we come to the *value* of capital, it is income which produces capital, and not the reverse, is, then, the stumbling-block of the productivity theorists." (Page 15; italics his.)

But this fact is also the stumbling-block to Fisher's theory; *for a change in the interest-exacting power of any piece of capital does not imply any change in the delay in fruition,* as must be the case if Fisher's theory be true. When the price of apples has risen, and hence the valuation of the orchard, that does not imply that apples are now growing ripe more slowly than once a year, nor that apple-trees have come to grow more slowly to maturity. Our fluctuations in prices pay little attention to any such slow, natural phenomena as that. They leap wildly overnight—often from hour to hour.

The Tributary Theory of Interest.—Indeed, the truth stated by Professor Fisher—which is a basic one in interest-problems —*is a stumbling-block to any theory except the "tributary" one.* This theory states that capitalism (as a thing quite distinct from capital) exists only because it can and does exact tribute, by force of circumstance. It is created solely for that purpose. Its valuation is appraised in those terms. Indeed, *if it fails in that purpose it automatically ceases to exist.* Any security which ceases to exact interest for its owner ceases to possess commercial valuation of its principal.

There is no conflict at this point between the Fisher theory and the tributary theory of interest. Both hold that the capital-valuation is determined by the interest drawn, and not the interest by the valuation. The only discrepancy between the two theories lies in the personalities concerned. Fisher says that it is the borrower who pays the interest, and the person who stints now, or has stinted in the past, who receives it. The tributary theory says, conversely, that it is the Ultimate Consumer who pays the interest, and who must stint indefinitely and increasingly in order to do so, while it is the person who receives interest (if in appreciable amount) who enjoys immediate luxury.

For no person draws interest on moneys needed for current existence. No person ever has, nor ever can, accumulate a dollar by interest on savings from wages, *because prices are raised against him, by his own interest-drafts as well as by other commercial processes, faster than those drafts or savings accumulate. Each dollar of interest raises prices against the Consumer by a dollar plus a percentage.* For the Ultimate Consumer is the only source of interest-payments, and the commercial world will not handle the payment for nothing.

Fisher can see no source of capitalism except the stinting of the wage-earner, slowly accumulating out of wages a margin over current cost of living, which may then be invested. But, even disregarding the fact that prices are raised by interest-charges faster than the charges grow themselves, the tributary theory says that certainly not one twentieth—probably not one hundredth—of the current supply of capitalism arises in this way. The bulk of it is *reinvested dividends, profits and surplus*—never produced as wages in the first place, and never saved by stinting in the second, but all of it extorted from the Ultimate Consumer across the retail shop-counter.

Indeed, the major source of capitalism to-day (as explained in the chapter upon Credit) is sheer fiat-credit—securities boldly printed first, and then given valuation by proof that the Consumers can be forced to pay interest upon them, through high prices. Such capitalism has not a single feature in common with Professor Fisher's alleged picture of capital.

The Use-Theory of Interest.—As to the "use" theory, Fisher says further:

> "The same objections which have been indicated in relation to the productivity theory apply to what Böhm-Bawerk calls the 'use' theories. These, in fact, are a special and improved form of the productivity theory." (Page 16.)

But the interesting feature of all this is that this relation between the income, as a cause, and the valuation of the principal as effect, not only denies the use and productivity theories. It also dissolves all foundation for the "origin" theory advocated by Fisher, namely, that interest is earned by the industry and self-denial originally embodied in the principal. The only act which produces interest is the exaction of tribute by force of circumstance, backed by a lack of moral scruple against doing so. Therefore, if anything may be said to "earn" interest, this alone can be it.

Again, if interest really depends upon, or is justified by, the diligence and thrift involved in the original accumulation of the principal, as Fisher argues, *then it must remain constant at all times thereafter, unaffected by any later variations in the interest-earning power, or in the delay in fruition, etc.* It must even be true, under this "origin" theory of Fisher's, that if the earning-power should sink to zero the interest would still be paid—or would be due, at least—because the origin of the capitalism had not been, and could not be, affected by these later events.

Yet, from the commercial viewpoint, this is pure reduction to absurdity. It is universal knowledge that interest-rates fluctuate constantly, from hour to hour, as rapidly as the Consumer evinces ability to be charged more or less.

The Ultimate Consumer the Source of all Capitalism.—Thus Fisher, in emphasizing this dependence of principal-valuation upon income, is supporting ably every contention raised in these pages. But what it proves goes further than he perceives. For, if the valuation of capital varies proportionately with the income, *then the principal is a result of, or is created by, the income.*

Therefore, whatever valuation the principal may possess *has been contributed to it by those who furnish the income.* Therefore the title to it, as property, belongs to those who created it. These are the Ultimate Consumers alone.

This is no irresponsible word-juggling. Indeed, it is the actual, visible history of almost all current interest-bearing securities. Each has begun with a valuation approximately zero. Then as the exaction of income upon it from the Consumer proved to be practicable, it gradually assumed full valuation. The increase in valuation ceased only when it had been found impracticable, through one form of resistance or another on the part of the Consumer, to increase further the exaction.

Originally the situation was not so bald as this. Originally the paper represented fairly accurately a cash-investment which was temporarily useful to the Consumer. But the cessation of interest-payments when the investment became fruitful was neglected; their abandonment when the appliances originally purchased had rotted to nothing was overlooked; and from that time forward there has accumulated, in geometric progression, a fund of securities the useful appliances back of which have long ceased to exist—and with their dissolution disappeared the last vestige of equity in the interest-payments.

To-day one needs take but the veriest scrap of paper and engrave upon it the stated ownership of some appliance or opportunity needed by the people, and it can soon be made equal to money in its purchasing-power. Indeed, the stated appliance or opportunity need not be one actually needed by the people; it may often be one which has been deliberately placed in their way, as an obstacle, because it is known that they would rather pay tribute on it than to go around it, or to overthrow it.

This is true to-day of the bulk of all the different "brands" or "blends"—the same goods with another name and wrapper, placed on the market solely for the sake of the profit to be made by advertising it. Yet, as soon as this tribute has been realized, the paper securities issued upon it become money—to an amount, whatever may be the legend on their face, some fifteen times the annual tribute—the lawful property of him who had sufficient "initiative" to print the paper, enough backbone to block the normal traffic "all it would bear," and enough nerve and skill to collect the tribute.

Zero Interest-Rates.—Professor Fisher, quite overlooking the significance of the existing factory-system, wishes to prove that, unless some appreciable interest-rate be maintained, there would be no way of supplying the workman with modern appliances. For this purpose he adduces the extreme illustrative case of a community in which the interest-rate is supposedly zero. He naïvely assumes with this, without a word of explanation, that the appliances used in his illustration *would still be personally owned.*

Yet the most obvious and immediate conclusion to be drawn from his premises, assuming a zero interest-rate, is that *no* *individual would bother to own any appliances whatever.* For the sole motive for that unnatural act, in any community of modern intricacy, is the collection of interest.

Once grant his premises as to a zero interest-rate and it must also be assumed that all appliances would be owned solely by the Ultimate Consumers in aggregate, for the sole purpose of supplying themselves with the commodities to be derived from their use, and without any folly of charging themselves interest thereon. Such would be the ideal economic community. But such ownership is a very different thing from the ownership-in-industry called capitalism.

Thus Fisher proves, by an arithmetical analysis of the productivity of his imaginary factory, that in this case the "owner" would receive no return so long as he kept up his plant against depreciation—which would appear to be an obvious corollary of the zero interest-rate. But that, if he let his plant run down, he might draw out its original value in the form of produce sold, but no more—which is also an obvious deduction from the zero interest-rate.

For a zero interest-rate indicates that the factory's operations proceed (as they naturally should) *without any reference to anybody's ownership whatever,* the Consumers paying merely the producers' wages, the depreciation and the raw materials, and nothing more. But such drafts by an imaginary and impossible "owner," from a factory which had lost its sole reason for being owned, could not, by any intellectual acrobat, be confused with true interest.

Fisher next reads into this situation, as if it were an axiom, his assumed theory of interest—namely, solace for deferred payment of principal—and then concludes:

> "If it be asked what motive could ever prompt anyone to keep up his capital when, so long as he does so, all income is foregone, the answer is that, under our assumption of zero interest, . . . the owner of the plant would just as willingly wait a hundred years for his $5500 as receive it now." (Page 22.)

But this is ignoring facts and reasoning in a circle with a vengeance! For there plainly exists nowhere any person willing to wait a hundred years for what might be had now. Nor is it necessary to imagine any such a mythical person in order to explain interest.

For there are to-day plenty of communities which regularly transfer capital from man to man for use upon a zero interest-rate. Within every factory, where no one owns anything, is one such a community. Another such, yet where there is plenty of private ownership of appliances, but *all persons owning about equally,* is the actual, normal, isolated fishing or agricultural community, in which interest upon loaned appliances is virtually unknown. These two sorts of actual community stand in perennial refutation of the idea that, if the Consumer will not pay the interest demanded by the capitalist, he must forego the enjoyment of the appliance until he may himself have become a capitalist, paying disgraceful as well as onerous tribute meanwhile.

These actual instances of communities enjoying a zero interest-rate also show plainly the true nature of interest, by contrast with what it is not. Plainly, interest can arise only where two conditions exist, namely:

1. Private ownership-in-industry; and
2. *Disparity* in such ownership.

If wealth were all equally distributed no one would draw any interest. No one would pay it. No one would need to borrow.

The combined rate and bulk of interest-payments in any land are an exact measure of its disparity of wealth. The exhortation of the poor to become rich, that they may enjoy what the rich now enjoy, is puerile nonsense. For if the poor could and did respond, and became rich, then *neither class could enjoy any income of interest, dividends or profits! There would be no non-capitalists to pay them!*

It will be shown later that interest-payments, per capita, are steadily upon the increase in the United States, and have been so for a long while. There is no need of statistical proof to show that disparity of wealth is upon the increase. *Each of these evils augments the other.*

Depreciation under Commercialism.—But this question as to the depreciation and up-keep of capital is no such an academic matter as the above debate might indicate. It is one of the vital practical issues of the hour. Now that the railroads are contending so vehemently for higher rates, particularly upon the nominal excuse of making good depreciation, the issue has become a vital public one. Let us quote again from the capitalists themselves, as they testified under oath before the Interstate Commerce Commission in 1910.

Mr. Ripley, then president of the Santa Fé, says:

> "There is hardly any railroad in this country to-day that is built as it ought to be built, that has the safety-appliances that it ought to have, or that is in the condition that the public interests require. . . . Of course, we do not like to depreciate our own property, but *the best railroads in this country* west of the Alleghany mountains are *very, very far short of what they ought to be* to give the service that the country requires and has the right to demand, or would have the right to demand if they paid for it." (Italics mine.)

But how does Mr. Ripley reconcile this statement with the testimony of Mr. Gardner, who represented the Chicago & Northwestern and the Chicago, St. Paul, Minneapolis & Omaha, both of them roads west of the Alleghanies? For the latter testified that on eighty-five millions of stock (the valuation of which, we insist, had been created by the Ultimate Consumers) fifty-six millions of dividends had been paid out, and a surplus of thirty millions more accumulated as the property of the stockholders, by the shippers, in ten years! Yet this, of course, was done quite in addition to paying every natural cost of transportation in the form of wages, and, so far as supplies were concerned, *prices which included similar dividends and surplus to a myriad of outside corporations besides!*

Yet, according to Mr. Ripley, these roads are still "very, very far short of what they ought to be" as to up-keep! And they are in that condition, he openly states, because the shipper has not paid the cost of their proper maintenance!

Here lies an abyss separating the ideas of the commercialist—and the business-world will agree that Mr. Ripley represents them in the broadest and best informed sense—from those of the public of Ultimate Consumers which is far too long, wide and deep to be spanned by mere talk. There *is* no compromise. The re-adjustment of ideas to be accomplished here is comparable with, if not greater than, those now (1916) separating the Teuton from the surrounding Allies.

Thus, also, Mr. Park, of the Illinois Central, upon the same point:

> Q. "The standard of the road at this time is not all that the public demands?"
>
> A. "No, sir; there are a great many things that should be done in the interest of the patrons, both as to industries and the opening of agriculture and timber-resources, and *for the comfort and safety of the passengers.*" (Italics mine.)

If this be the present state of the roads, after what the public has paid for their operation and maintenance, there can be no question as to the necessity for a radical change in system. For these corporations, through selected officials and figures under oath, have told the public commission representing the hundred million Ultimate Consumers, who constitute the sole source of all funds whatsoever:

1. That one of these representative corporations—one chosen among some fifty to represent the rest—is still carrying a debt of eighty-five millions which it incurred originally because of the temporary unproductiveness of certain primitive appliances, and that it still carries this debt long after these appliances had become productive, had continued their productivity throughout a normal life of usefulness, and had then mostly rotted into that dissolution which comes to all things—instead of its beginning to cancel that debt, as in equity it should have done, as soon as each appliance became productive, and finishing that cancellation long before the appliance finished its usefulness.

2. That during merely the last ten years the people have paid for their transportation, *in excess of the full natural cost of every legitimate item of operation and up-keep, as charged in every factory-system in the land,* more than one hundred per cent of this eighty-five millions—and that their payments during the forty-four years preceding this last ten had been in like excess—*yet without the public's having acquired thereby an iota of title to ownership, as a result of all these payments!*

3. That, even after all these cash-payments by the people, *they have not yet succeeded in paying off a single dollar of the original indebtedness,* incurred for these long-ago temporarily unproductive appliances, now gone the road of Rip van Winkle's youth; but, under this insatiable, irremediable, insensate thralldom of debt, they must continue to pay endless tribute thereon, to the third, fourth and fourteenth generation!

4. That, even in addition to this hopeless present moment,

the future promises worse; for all these huge payments, over and above the service returned, *have not sufficed even to keep the debt from growing.* For the road now stands burdened with over $109,000,000 of capitalized debt in the form of stock and $176,000,000 of bonds!

5. Yet that, on top of all this hideous disregard of the sacred property-rights of the people to the money in their pockets, there still remain undone "a great many things which should be done for the comfort and safety of the passengers!"

That, we insist, is an official, yet frank, confession of maladministration of public property, of falsity of trust to the Consumer who places his money in the road's hands for expenditure, and of deliberate confiscation of the people's property, which is bound to be recognized in its very ugly true aspect, when once the rising issue between our commercial autocracy and true economic democracy has once come to a head.

That is the plain reason why we have always with us "the railroad problem." That is why the railway-corporations are continually finding themselves "harassed." For they have embarked upon a policy which is quite untenable, yet which is self-accentuating beyond their control. It is carrying their affairs into a hopeless tangle of high explosives just as inevitably as that inherited by poor Louis XVI of France.

Yet it is not argued here that the railways are a whit worse than other corporations, or than the small businessmen of the land. The policies and doctrines quoted here are merely fair samples of all commercialism.

When events shall have marched their inexorable way to the inevitable conflict between democratic rights and special privilege in economics, when not only the property of the commercialists *but also their lives and homes* are to be tried before a bench and bar far more grim than these accusing pages, do these gentlemen really expect an outraged people to accept such statements as those quoted above, as a basis for granting the roads still more money? Or even for granting them pardon for egregious offense against the state?

Do they expect the people, when once awakened to the issue, actually to believe that interest or dividends is money paid for the use of appliances only while the latter are temporarily unproductive? Or that it represents payments made by the self-indulgent to the frugal and industrious? Or that it represents present enjoyment of past labor? Or that it forms the best method of hiring somebody to maintain capital in a condition fit for the people's use? Or that what has actually been done, through the agency of the commercialists, in the way of service, has never been fully paid for? Or that the commercial system has served to keep our industrial appliances in their best state for service? Or, in short, that the people have not already long ago, quite in addition to meeting all natural costs of service or supplies, *actually bought the principal-valuation of the roads, and of all other commercial properties,* by those cash-payments of interest, dividends, profits and surplus which, according to commercialism's most erudite advocate, alone created those principal-valuations?

These are truly the questions of the day for the average businessman; for *to-morrow it will be too late to debate.* The march of events will have been found to have swept suddenly the topic out of the realm of public discussion and into that of prompt and drastic action. The bitter experiences of the last five years should have taught some inkling of the uncontrollable way in which events come crashing like an avalanche, when once they start.

For the above indictment, it is carefully to be noted, is not based upon, nor does it consist in, any slightest degree of "muck-raking"—any dragging into the open of any secret chamber of economic horrors, or extreme abuses, or pitiable human frailties. *It has been based only upon the best which the big corporations officially find to offer for themselves.* It has been stated that these big corporations are no worse—only more public—than the little, private commercialists.

Nothing has been said, for instance, of such inevitable instances of the fall of human nature before the temptations of the commercial system as are visible in the notorious histories of the Erie and the Pacific roads in the earlier decades, or of the New Haven or Rock Island in recent ones. Out of the fifty roads concerned directly in the hearing mentioned the statements quoted come only from those selected by the roads themselves. Out of five volumes of such testimony in this single hearing we have quoted from but one. It is not the worst which the commercial system produces, but the very best, which is evil enough to condemn it beyond reprieve or pardon.

The Reaction of Commercialism upon Standards of Honesty.—Yet it would be distinctly unfair to our own side of the argument if it were not mentioned that it is humanly inevitable that the commercial administration of economic properties should occasionally become, locally and temporarily, far worse than the above. Thus, as a straw to indicate the wind, read the following editorial from the *Railway-Age Gazette,* America's prominent engineering periodical devoted to the railways, and one of the most conservative and able among our technical journals, in its issue for May 29, 1914:

> "The New Haven road is not the only one which has been Mellenized,[1] and such revelations as have been made regarding the financial management of some roads are enough to shake public confidence in railroad management in this country. The situation is worse than that. *They are enough to shake the foundations of the confidence of the people of this and other countries in the financial management of all kinds of business concerns in America;* for the men directly or indirectly responsible for the mismanagement of railroads are as largely interested and as potent in manufacturing, mining and other industries as they are in the railroad business. . . . Certainly when railroads can be Mellenized there is need either for new legislation, or for the enforcement of existing laws, or for both. The great danger is that the disclosures regarding the conduct of the Mellens, the Yoakums and the rest of their ilk, will cause the passage of more radical legislation than the conditions justify. If excessively drastic legislation shall be passed we trust that there will be no hypocritical wailing from Wall Street about ignorant public hostility toward railways and about the public being led by demagogues. The buccaneers in Wall Street, and the fools and cowards in Wall Street who will let the buccaneers work their wills, are the chief authors of such legislation. It is a toss-up whether the demagogues or the highbinders of finance are doing the more to bring all the details of business under the regulation of public officials. Eugene V. Debs, Morris Hillquit and Upton Sinclair think that they are the real leaders of the socialist movement in this country. They take themselves too seriously. The real leaders of socialism are such men as Charles S. Mellen, B. F. Yoakum and the directors of the New Haven, 'Frisco and other roads who are

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[1] Mr. Mellen was then president of the N. Y., N. H. & H. R. R.

> too crooked, cowardly, indolent or incapable to perform the duties of their positions." (Italics mine.)[2]

In preliminary support of that fact of American history which is to figure most prominently in our later analysis thereof, namely, that the country is, and long has been, suffering from a steady growth of commercial militarism at the expense of our productive system—by a tidal drift of population from productive into commercially combative occupations—the following editorial is quoted from the same journal, of two weeks later:

> "It is a remarkable fact that most of the offenses against law and good morals that are committed in connection with the management of railways are committed in their financing, and that in most cases those who commit them are men who have made their money as bankers, manufacturers or mine-operators and have broken into railway boards of directors for the apparent purpose of exploiting the roads. In almost every case the railways whose finances as well as their operation are directed by men who have come up in the railway-service are not only efficiently, but also honestly, managed. It is curious that this fact is overlooked, and that the very classes of businessmen from which the wolves that ravage the railways come are among the loudest in their lamentations regarding the way the railways are mismanaged."

In this connection it is to be noted that Mellen, in a full-page statement in the New York *Times* for May 20, 1914, admitted that his orders came from the late J. P. Morgan. What may have been the character of these orders, and the ideas as to capitalization on which they were based, may be inferred from the following report of Mr. Mellen's views appearing in the *Railway-Age Gazette* for Nov. 14, 1913:

> "Mr. Morgan's offer of $20,000,000 was for the stock of the New England Navigation Company, which cost us less than $6,000,000. . . . The railroads will all go under government ownership. It is coming quickly. Five years ago I felt that I should not live to see it. But now I think I shall. Regula-

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[2] Mr. Yoakum was then president of the C., C., C. & St. L. R. R. The author requests any reader who regards this book as radical to compare the most extreme language found between its covers with this outburst of righteous indignation on the part of the conservative technical press.

> tion by the government during the last ten years has tended to lower the value of railroad stocks as investments. There is not the big money in railroads that there used to be. There will not be any opposition to government ownership when the time arrives, because private capital will find the field unprofitable as a result of the too strict regulation."

But these warnings, as usual, fell upon deaf ears. Within a year it had become the Rock Island road which had come into the limelight, as the latest candidate for public condemnation. Its stock had fallen in fourteen years from $207 to $18, and on April 20, 1915, it passed into the hands of a receiver. Regarding this little incident the New York *Times* said:

> "Indignation over the unexpected turn in Rock Island affairs was voiced by many. There were many things to be explained, brokers and bankers said. Many persons had been grossly deceived, they held, while a few favorites had been apprised in time to escape the calamity. Particular indignation was expressed that A. F. van Hall, the Amsterdam banker who spent twelve weeks in this country in the interest of Dutch holders of 86,000 shares of Rock Island, should have been allowed to sail for Holland without any intimation of the reverses for the company in which his clients were interested. Mr. van Hall's ship had not cleared the lower Hudson when the news of the receivership came over the ticker from Chicago."

It is plain that this commercial economic organization of ours, despite the width of its distribution of stocks and bonds, is no democracy at all, but an irresponsible oligarchy, in which the small stockholder suffers almost as helplessly as the Consumer. For the item just quoted is merely the one coming to hand most conveniently in the daily press, representative of what has been prevalent ever since the Civil War, but with frequency and size accelerated since the boom in commercialism aroused by the Cuban War of 1898.

Stock-watering.—In the above indictment of capitalism little has been said about watered stock. This is because the question of deliberate stock-watering must appear, after what has already been said, as a matter quite irrelevant to the public interests. Whether interest-bearing securities be originally water or not makes no appreciable difference to the public, so long as there is no idea of retiring them, without refunding, as fast as the success of the enterprise permits, and faster than the appliances depreciate with use and time.

What difference does it make whether the appliances be there or not, so long as the real policy is to issue securities at a volume and a rate of interest always openly adjusted to the maximum which "the traffic will bear"? What difference does it make whether a corporation about to invest half a million dollars in appliances issues stock of nominally one million, paying six per cent, and therefore standing at about par, or two millions paying three per cent, and therefore standing at fifty? The two millions will soon be paying six per cent, and therefore worth two millions, or the one million will soon be paying twelve, and therefore worth two millions.

In either case the stock has become by that time three-quarters water. In either case the appliances will have rotted, worn out or become obsolete inside of twenty years, and then the stock will have become *all water,* whatever may have been its original face-value or its present valuation!

Yet this valuation, in the majority of cases, even after reaching this point of being all water, *will still go on increasing indefinitely thereafter*—either by market-appreciation, if the face-value has remained unaltered, or by refunding to a larger face-value, in order to keep down the apparent rate of interest or dividends. Whether the stock were originally half water or the appliances are now all rust and dust, makes no difference to the Consumer. The price of service continues to rise, just the same.

Dividends on Dead Horses.—Thus an anonymous writer in the Philadelphia *Public Ledger* of May 20, 1918, relieves his feelings in regard to the local street-car situation by a plaint concerning the "Perpetual Dividends on the Souls of Dead Horses," as follows:

> "Just think of it! Horses that in life paid for themselves many times over and really earned the right to rest eternal in the equine elysium. . . . With what kindness, with what tender care, with what constancy they [the corporation-officials] watered the stock! Almost at the end of every round-trip! The horses may lie a-mouldering in the grave for sixty years past or more, but their souls go marching on.

> They go on collecting 72 per cent per year, not on their mortuary value, but on their alleged original cost."

The whole modern system of capitalism rests upon the growth of tribute-power based upon original investments made, if ever, two or three generations ago. And three generations hence will find our great-grandchildren still burdened with this same indebtedness to the kind capitalist as now, or a greater one, for appliances bought before the Civil War, used while Garfield was president, and rotted before this present century opened! They will then still be paying this never-ending stream of interest upon a debt which is zealously preserved from being paid—and the nature of interest will still be explained, to our youth then enjoying a university-education, as a necessary balm for the delayed enjoyment of the principal on the part of those whose bones will then have been mouldering for four generations! The furthest posterity of these capitalists of Buchanan's day (should commercialism continue to survive) will then be as deeply hurt as a German is by treaty-breaking, at any suggestion that the debt should be finally paid and the balm-spigot shut off forever.

Recent Expansion of Capitalizations.—Up to the close of the nineteenth century the general industrial system of the country had adhered fairly religiously, in spite of exceptions, to the principle of paying interest or dividends only upon the actual investment in appliances; and while the inequity of interest was then just as pure in kind, it was much less in degree. Railroad and mining stocks had always been unquestioned exceptions to this rule, it is true, because of the element of gambling which had entered necessarily into these fields of investment. But the bulk of all industrial enterprises were financed conservatively.

But late in the century there arose in financial circles the practice of rapid consolidation, with the accompanying issue of large volumes of interest-bearing securities. "What the traffic would bear" in this direction was now determined by speculative trading in these securities on the exchanges, where such paper had rarely, if ever, been seen before. It was this practice which had already resulted, long before the truly modern rate of progress had been reached, in the enactment of the so-called Sherman anti-trust law of 1890.

By the opening of the twentieth century the commercial boom resultant from the Spanish War had brought all industrials into this field. In 1901 the United States Steel Corporation was formed, with a gross capitalization in the hundreds of millions, from component plants whose capitalization aggregated but a fraction of that amount; and much even of that original stock was surely inflated. Because of the complication of many plants and subsidiary companies the exact figures are difficult to determine; but the New York *Times* for Oct. 27, 1911, in reporting the suit brought at about that time to dissolve the Steel Corporation, under the anti-trust law, makes the following statement:

> "At the time of its organization the corporation had, in round numbers, $510,000,000 of 7 per cent cumulative preferred stock and $508,000,000 of common stock, $303,000,000 of its own bonds and about $81,000,000 of the bonds of its subsidiaries and other obligations—a total of $1,402,000,000."

Incorporation upon such a magnitude as that had never before been known. From that time forward a pace was set in the rapid expansion of capitalization which alarmed even such a hardened financial veteran as Russell Sage, whose protest against it was quoted in the chapter on Credit.

But, in spite of forebodings, the negotiations for the "placing" of this flood of new securities proved always to be most profitable, and the dividends paid generally justified the investor. Thus, on Feb. 18, 1915, the *Times* reports the drawing of "the biggest check ever paid," for $49,098,000, in payment for Pennsylvania Railroad bonds. The profits on this sale were reported as being $1,715,000, and a certain syndicate was said to have made on this deal "$980,000 without a dollar up."

These incidents mentioned here are but straws indicating the wind. Although the recent New Haven fiasco stirred all New England, where the stock was widely held by widows and professional men, yet in the West, where Rock Island and Missouri Pacific interest people more, it was but little noticed. No one of these outrageous proceedings affects enough people simultaneously to arouse competent revolt. No one knows how to revolt effectively. So long as they affect only stockholders or "lambs" (who are anybody's meat) they will never be appreciated by public opinion as a whole. The bulk of these happenings scarcely win double headlines in the daily press.

Normal Commercialism.—These frequent obvious swindles upon a gigantic scale do not represent abuses, it must be carefully noted, nor monstrosities, in the commercial world, but merely the normal philosophy of the commercialists towards the public of Consumers, developed into a magnitude where it becomes conspicuous. Every petty commercialist is doing the same thing upon his piffling scale. Modern discontent rests not upon merely occasional abuse of a good system, *but upon the inherent falsity and inefficiency of a policy the daily workings of which permeate all society, in every land where money, exchange, bargaining, investment and speculation prevail in fair freedom.* God help the world when the remorseless course of events has brought things to the point where the entire people perceive this falsity simultaneously; but too late for rational remedy!

For it is not the ideal, proposed systems of society which necessarily demand some strange, angelic brand of human nature to make them practicable, as is so commonly said. It is the present commercial system which requires the impossible. Indeed, our present view of human nature as a frail thing, predestined to sin, must be largely due to the fact that we see it at work always under a system which, while pretending only to strain it "all it will bear," in actuality always loads it until its activities have been sagged to one-fifth of normal, putting upon mankind a pressure which distorts its opportunities into temptations far beyond its powers of endurance.

Because interest and profits are institutions essentially inequitable, and because we have made them a prerequisite to industry, therefore inevitably the control of modern enterprise is drifting away from honest, scrupulous methods into those condemned so unsparingly by the *Railway-Age Gazette.* This tendency parallels to a startling degree, for instance, the drift of control of both politics and economics in France, in the seventeen-eighties, into the hands of the most unscrupulous of the aristocracy. It parallels the growth in power of the most uncompromising advocates of slavery in the American South in the eighteen-fifties, or that of the most extreme militarists in modern Germany.

If it should ultimately develop that the far-distant guillotine of 1793 spreads across the modern director's table a shadow looking wondrously like a dynamite-bomb, that the outlines of Wall-Street and the Fifth-Avenue skyscrapers melt indistinguishably into those of the Tuilleries, and that the courteous questionings of the Interstate Commerce Commission both echo and foretell strangely the sterner tones of the Parisian Committee of Public Safety—announcing its daily consignment to the tumbrils of those who had done nothing worse than to hold on to special privilege just a bit too long—it should not be considered strange. If this should come, the responsibility for its coming has been rightly placed, in part, by the *Railway-Age Gazette.*

Summary.—In order to summarize all which has been debated above as to the nature of interest, let us list the conditions under which, in the name of the most ordinary sense of justice and equity, the bargain-aspect of interest which forms the basis for Fisher's commercial theory, might constitute a bargain approaching fairness, whether to the two individuals active therein or to the community of Consumers. And secondly, let us inquire whether these conditions now prevail in the actual commercial world.

These conditions are at least six in number, namely:

I. Society must actually owe to the capitalist himself the existence of the appliances or facilities in question, access to which is denied the Consumer except upon the payment of interest, either

a. Because the capitalist was their inventor, or

b. Because he was their creator by productive labor, or

c. Because they represent frugality on the part of the capitalist in comparison with the spendthrift luxury of the average non-capitalist Consumer.

II. The loan of the capital must be really needed by the borrower, whose payment of interest thereon must be voluntary—rather than the loan executed without the wish of the borrower, solely for the sake of enforcing the payment of interest.

III. The two parties to the bargain must be individuals, in order that the balance of their powers in bargaining may even approach equity.

IV. The loan must be inevitable, as being the only or the best means known to society for connecting the workman engaged upon temporarily unproductive tasks with his necessary supply of immediately consumable commodities.

V. The loan and the payment of interest thereon must be limited to the period of temporary unproductiveness of the enterprise in question, its first productivity being devoted to the cancellation of the loan and the cessation of interest-payments.

VI. The loan must concern appliances useful to the public good and the life-support of the Consumer. Reference is not had here to watered stock, which we have seen is a question immaterial to the Consumer, but to investment in various appliances and activities familiar to commercial competition *which accomplish nothing of any value whatever to the Ultimate Consumer yet which exact remorseless tribute from him.*

Query.—Do all of these essential conditions, or even any one of them, prevail in the actual commercial world of to-day? We shall show that not one of them does so. Still less can it be said that commercialism is supported by simultaneous innocence upon all these charges against it.

I*a. Is Interest due the Capitalist because he Invents?* This would seem a silly question if it were not for the fact that the allegation is constantly met, and from college-bred businessmen too, that the capitalist "got up" this or that property or enterprise, and hence has a right to anything he may be able to extort from society for its use.

The reply to this question is to remind every reader that careful distinction must be maintained between invention and capitalism. So far as invention is concerned, that is a purely productive process which, because of its peculiar nature—independence between time invested and result produced, together with novelty—has had its wages awarded to it through a peculiar system of monopoly-fee known as patent-rights. But the reward of the inventor is none the less pure wages, in that it is received for productive, as distinctive from combative, effort.

The federal statutes have carefully distinguished that which is patentable (because of novel value to the public) and that which is not. None of these commercial enterprises which demand dividends so relentlessly is patentable.

Moreover, the inventor's privilege of tribute ends in seventeen years, whereas the capitalist's privilege of collecting interest is endless.

It must be plain that, just because some man happens to combine the functions of inventor and capitalist within a single individual, his reward as one cannot be bolstered by nor confused with his worth as the other. Assuming that the patent-system does accord to the inventor his proper return, the capitalist part of this man can claim no reward upon that same basis also.

But as a matter of fact, without attempting to debate here the equities or inequities of the patent-system, it may be stated incidentally, as from one whose vocation is patent-litigation, that the penetration of commercialism into that system, in the negotiability of patents, quite robs the inventor of his natural rights. If the inventor happens also to be a good businessman, he wins; but otherwise the bulk of his rights are either lost directly to some abler businessman, or else are swamped in a struggle against those artificial obstacles which commercial competition deliberately piles in the way of every new enterprise.

For commercial militarism regards any intruder into established incomes, however advantageous to the public the newcomer may be, with the same tender spirit of welcome which a babe receives from a pack of hungry wolves. The bulk of all investment of money and energy currently needed for establishing new inventions goes not at all to experiment, nor to true public education at all, but to combat with these wolves.[3]

I*b. Is the Capitalist the Creator of the Capital?* Whatever may have been the case in some earlier prototypes of the modern capitalist, in this respect, certainly it does not hold true now. Fully 95 and probably 99 per cent of all modern capitalism has no connection whatever with saved and invested wages. It consists solely of re-invested profits, interest, dividends and surplus.

The equity of secondary interest or dividends drawn upon these certainly cannot be based upon a principal which embodies this same question as to the equity of its ownership. That is vicious reasoning in a circle. And even as to the remaining small percentage to which capitalism possibly consists of savings from productive labor, it cannot claim interest as an equity based upon that original labor, which was fully recompensed in the original wages paid.

But in some special cases it seems impossible to avoid attributing some creative aspect to the activities of the capitalist. Take for instance the case of the late Mr. James J. Hill, "the builder of the Northwest." Unquestionably he did an enormous amount of constructive work.

But no one begrudges him the most generous recompense for all such work, if paid in the form of wages or salary. His salary might have been equal to that of the president of the United States, if paid for work jealously guarded from every waste of effort in combat, and if no interest were paid thereon; yet there would be no inequity.

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[3] In twelve years' experience in patent-litigation the author recalls only two cases wherein the inventor appeared as an interested party, even to minor degree.

But neither of these conditions was observed. Mr. Hill received no salary at all for much of his constructive work, while society permitted him to be both tempted and forced to waste the bulk of his time and genius in commercial combat of a silly and tragic sort; and for this he was permitted ultimately to reimburse himself at the public expense by sums of which no accounting whatever was even requested.

Finally, society was so silly as to leave the situation with him holding an endless title to, or hereditary lien upon, the territory which he had helped to develop, for interminable future tribute in the form of interest, such as constituted Mr. Hill a veritable feudal seigneur. For indeed he had won this hereditary title to tribute as purely by right of conquest as ever feudal lord won his baronetcy.

But why should the American people, which is so proud of its efficiency, ever do so silly and inefficient a thing as to force Mr. Hill to waste three-quarters of his energy in fighting for a chance to work? Why could it not expect him to be as efficient a pioneer, upon the same sort of pay, as were his predecessors in the development of the Northwest, Messrs. Lewis and Clark?

Those pioneers encountered from the savage denizens of unbroken wilderness no such effective antagonism to progress as Mr. Hill encountered from his "civilized" commercial competitors. The difference between these two instances shows at a glance the form of our social-economic evolution during the last century.

I*c*. *Is the Equity of Interest Defensible upon the Ground of the Relative Frugality of the Capitalist over the Interest-payer: The Ultimate Consumer?* The reader will not be insulted by argument upon this question. Yet it states merely what is heard almost daily from the "man in the street" by anyone who attacks capitalism. We have seen that it has the sanction of Professor Fisher, of Yale.

II. *Is the Payment of Interest or Dividends by the Consumer a Voluntary Bargain?* Never! The bulk of all capitalism is foisted upon the public without even any pretense of obtaining its consent—except to test whether the traffic, either in securities or commodities, will sag too far under each new burden to make it a profitable one.

The first aim of every businessman, large or small, is to expand the volume of interest-bearing debt. The opportunity for loans at interest is not sought by him who pays the interest, but by him who receives it. This is true whether it concerns a franchise for a new public-service corporation, a new factory or an additional corner-grocery.

As Mr. Ripley, of the Santa Fe, says:

> "It is very important, I think, that railroad-credit should be maintained *in order to afford opportunities for investment.*" (Italics mine.)

Here Mr. Ripley's clear insight and frank speech again reveal the essence of commercialism. This universal commercial desire for—this insistence upon—opportunity for investment, as if it were a basic right of the commercial world, even when palpably antagonistic to public interests, is destined to form one of the two pivots upon which whirls the re-adjustment process which is to abolish all commercialism. It is when so great a burden of these has been issued that the Consumers can no longer pay interest thereon, so that all collapse together, and not before then, that the whirlwinds of economic revolution will have been unloosed.

Nor need these "issues," in order to be effective, be engraved by a bank-note company and floated in Wall Street. Suppose, for illustration, that an additional grocery-store is started in the district serving my home. Herein is an expansion of the capitalism engaged in supplying me with food—a "loan" to me of stock and fixtures; and, according to Professor Fisher, I pay interest upon this investment because, as a free bargain, I prefer to do that rather than to forego a regular supply of groceries until I can accumulate, by my own surplus productive effort, such a stock and appurtenances of my own!

The suggestion is too absurd to be worthy of serious debate. The additional store is not needed. My wishes in the matter were not consulted in the slightest. There is not a ghost of a "bargain" involved.

There are plenty of stores already there. *If they are poor, make them better; don't duplicate them.* No gain to society, but a loss, has been accomplished by the seventh store, where the six already there were five too many.

Yet upon every dollar of capitalism in that new store I must pay interest, whether I trade there or not. For my own purveyor will lose some trade to the newcomer, and so will be forced to figure his fixed charges upon a smaller volume of business than before—or, in other words, raise his prices.

This is, in a nutshell, our whole recent economic evolution. Prices are rising because a larger number of competing sellers, per capita of consumer, are continually crowding into every line of trade.

If I had been consulted in this matter, as by law, I should be required to be (if we had a natural or just economic system), I would have said:

> "No. There are already six stores serving my street, which is just five too many—five more than any businessman would permit, were he appointed to operate the community's food-supply as he does his own factory. Interest is charged up, as a 'cost of doing business,' on all six stocks. But the volume of trade which is passing through the six stores is only that which one could handle easily, if the other five were prevented from butting in.
>
> "No. Let the proper authorities—my economic rather than my political representatives—start a single store, collecting from me and my fellow-Consumers the requisite capital, place a salaried man in charge, with complete monopoly of all the trade in the district—no competing store being allowed, any more than we allow a competing post-office—and then see to it that every atom of food becomes the property of the Consumers-in-aggregate from the instant it enters the city-limits.
>
> "From that start let the facilities be built up properly, by the accumulation of a surplus out of daily receipts, just as is done in every business, *except that that surplus and the appliances bought from it belong to me, until they wear out or rot.* And equally they belong to every other Consumer, young or old, industrious or lazy; because he will partake of their value *only as he buys.* No one need ask him the origin of his money. It is as he spends it that he becomes an effective citizen of the economic world."

Under such a system as that I can well afford to forego every cent of interest which I might conceivably have drawn upon my capital, if invested under commercialism—every bit of exclusive title which I might have acquired by going into the provision-business—because of the tremendously better bargain I now would get every time I passed a dollar across the shop-counter. I can well afford to present gratis to every later comer into my district, whether by birth or by immigration, full enjoyment of the facilities which have been built up on money coming from my purchases, *because I avoid the inconceivable expense and inconvenience entailed by the antagonism set loose by anybody's trying to call those facilities "mine."*

In comparison with any such an orderly, equitable, factory-system of retail-supply as that, the present license for anyone who has the "initiative" (which usually means that he doesn't know what else to do) to butt in with an additional store, is sheer, unmitigated anarchy. For anarchy, as a doctrine or a fact, means merely *action without law* where there should be a law to be observed.

Public Ownership.—In this connection must be made at least bare mention of the very large topic of public ownership, to the extent of covering its points of contact with that of interest; for to many persons public ownership stands as a ready solution of all these ills. But, without being misunderstood as broadly opposing public ownership, it is yet to be noted that this policy—at least, in the form which alone is now legal and constitutional—offers the Consumer no escape from his burden of interest-payments. This is true for these following reasons:

1. Cities can now acquire properties only by their purchase with the issue of interest-bearing bonds. Indeed, this sort of state-capitalism now constitutes one of the more important of the minor fractions of all capitalism, and has already aroused the resentment of the socialists.

The Consumer, by public ownership, has merely exchanged one form of capitalism for another. Indeed, if the former owner, in selling, has accepted city-bonds in payment, the capitalist in the two cases may be the same man.

2. The fact that the city-bond may bear a lower rate of interest does not help the Consumer, as an interest-payer. For the volume of all other forms of interest-bearing security currently issued is not a fixed one, but expands indefinitely, *being limited in size only by the public's ability to absorb.* Even if the transfer of a single property to public ownership may have eased his

pocket, capitalism upon a hundred other new projects will promptly expand until it has fully absorbed the new margin of comfort. This is shown by the fact that within a few days the "traffic" will have sagged back again to "all it will bear."

Every period of panic or prosperity evinces upon a large scale this process of come-and-go of security valuations, to follow the interest-paying capacity of the Consumer. Every day's fluctuations in Wall Street evinces it upon a smaller scale. The expansive pressure of capitalism, against the ability of the Consumer to pay interest, is exerted equally all over the commercial world, through a medium so fluid as to exhibit very little viscosity in its transfer of pressure from business to business, or even from land to land. Nothing can help the Consumer appreciably or permanently except a resistance to commercialism exerted by him *in unity with all other Ultimate Consumers, and simultaneously against all forms of commercialism.*

IV. *Is an Interest-bearing Loan Inevitable?* The entire existing factory-system, involving as it does the daily direction of labor into tasks not immediately productive, and the entrusting of costly appliances to those who do not own them, yet without any suggestion of any burden of interest-payments attached thereto, stands as a complete refutation of the idea.

V. *Are Interest-payments Limited to the Period of Temporary Unproductivity of the New Appliances?* Never! Not only is the overwhelming bulk of all interest now paid upon capitalism attached to appliances which have long been productive, or which have lived their natural life of usefulness and already fallen into decay or desuetude, but the very fact of their becoming productive acts as a signal, under commercialism, not for the concellation of the loan and the termination of interest-payments, but for *an energetic expansion of the capitalism attached thereto.* The attainment of the appliances to productivity is accepted as a sign that the traffic based thereon will now bear a heavier charge; and so that charge is immediately imposed, in the form of additional issues of interest-bearing securities, or of a rise of market-value of those already out.

VI. *Does the Loan always concern Appliances which aid the Life-support of the Consumer?* No. But this is properly the topic of a later chapter, upon commercial competition. The illustration of the six competing grocery-stores will suffice for the present.

But before leaving the topic of interest and dividends some more general aspects may deserve a word. First comes the widespread idea that if the rewards of the capitalist and the promoter were abolished progress must be materially arrested.

The facts overlooked in this idea are at least three in number. First, the chief need for the commercial promotion of new enterprises, under the present system, is to *overcome resistances which are artificially originated by commercialism itself*—resistances due solely to the privilege of private profit attached to the goods already in the market in the same line.

Under commercialism the most effective resistance to progress lies in the difficulty of finding capital. Years are often wasted in a discouraging wandering hither and yon, until the inventor may happen upon the one individual who chances to combine the three requisites, namely, free capital, free time for undertaking a new enterprise, and a personal disposition to be interested. Many may be found who possess one, or even two, of these; but it takes a long search to find all three together.

But under a national factory-system, with all the capital in the country available under a single commissioner, and he sworn to develop new ideas, as his sole duty, this difficulty would melt as ice in the sun. And with it would go several other present obstacles to progress which are inherent in commercialism.

The doctrine, for instance, that because a new device has merit it must surely be valuable and acceptable to one or another of the large corporations engaged in that line is utterly false. It is just as false a notion as that a dealer is best off when he handles the maximum volume of trade. All such corporations have enormous investments in patterns, jigs, dies, catalogues, etc., for the output already standard with them. For all this to be upset and junked by the appearance of some better device, whether in their own or a competitor's hands, is a commercial catastrophe.

Such corporations commonly spend large sums to discourage the introduction of novelties. They never favor them unless the profit promised is overwhelmingly great.

Further, new enterprises, like inventions, always originate (unless they are purely commercial in their nature) *in uncommercial minds.* These minds do not respond to commercial rewards. They accept the promoter's task and reward *only because society offers them no other or better.*

These originators would initiate just as actively upon wages as upon a gambler's chance at some profits. Indeed, being better and more regularly fed, they would originate more actively. The man-in-the-street who talks glibly about inducing invention does not know that the bulk of all modern invention is performed by *salaried employees* of the larger corporations, who invent much as a book-keeper posts his books.

Yet, if anyone still doubts, there is one fact prominent in American, if not in world, history which refutes his doubts. This is the wonderful progress which has been made by two arts in particular, not to mention others, namely: (1) Medicine (including surgery and hygiene), and (2) Military technique. *Yet in neither of these arts is any pecuniary reward offered in the form of profits or dividends, or even royalties.* Both military engineers and physicians would be disgraced by any attempt to secure them.

Finally, the biggest existing bar to the adoption of a host of new things which are already invented, and which are of unquestionable value to the public, is the burden of paying interest upon the commercialism attached to them. Take for example the matter of putting the wires underground. All over the land aerial wires, with their supports, constitute a visible smirch upon our civilization. Here and there, it is true, traffic is sufficiently congested so that it pays to put them underground, even in the face of having to meet a current interest-charge of ten per cent upon the cost of burying; but almost everywhere they are still aloft.

If they could be buried without the interest-charge, with the Consumer burdened only by depreciation, every wire would have been invisible long ago. But to-day, under commercialism, the general gain to the community in improved appearance of highways cannot enter the question, nor affect the result, because *that factor does not pass through the treasury of the telegraph or telephone company.*

Mining-engineers tell us that our underground stock of bituminous coal is now being mined under a plan which wastes surely from 25 to 35 per cent of the deposit, forever, just because of the investment which would be involved in a more thorough policy. As two-thirds of the coal is removed the roof is allowed to cave in upon the remainder. At no future time can a generation of men under greater stress for fuel than we—and we need more coal badly enough—ever reclaim this residue. The vein has been dissolved in earth. God's bounty has been wantonly wasted forever.[4]

Yet these illustrations are but two instances out of a myriad of potential advances in civilization and comfort, or of growths in population, which are now forced to lie latent—some now staring us in the face, like the wires, others hidden underground like the coal, and others still dormant in the brain of the inventor—the enjoyment of which is denied us solely by our addiction to the social vice of commercialism. The engineering profession stands ready to improve the appearance and efficiency of our factories, our streets and our homes by hundreds of per cent, and to make these improvements pay fully for themselves; but they cannot make them pay ten, twenty or fifty per cent of their first cost in annual interest-charges, in addition.

Thus our technical progress, our civic pride, our public hygiene, our domestic convenience and our general standards of taste, as well as the purchasing-power of our dollar and the continuity of our employment, have all been sagged by commercialism to the lowest point which biological existence can permit. We have seen ugly factories, ugly streets, hideous slums for the poor and graceless barracks for the rich so universally that we have long ago lost, or never imagined at all, what a normally beautiful modern city should look like.

No; there is no other brake upon progress—not even war itself—which can even approach the repression and retardation of progress which is daily exerted by commercialism!

The Modern Circulating-Medium—Interest-bearing Securities.—The one reason why all this growing burden of commercialism has not long ago brought about that social catastrophe which, it would appear from what has been said, must be ultimately inevitable, is that commercialism, through its interest-bearing securities, has simultaneously energized the vast populations of modern times to an almost incomprehensible degree, *by its creation of a huge fund of circulating credit-instruments.* Such a circulating-medium constitutes the very life-blood of an economic society. Society collapses when this medium is attacked as promptly as does a man when his heart is struck.

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[4] The applications of electricity to domestic comfort which now stand available, if only electric current might be bought without commercial charges, is beyond imagination. Every engineer knows that the factory-system costs of electricity—fuel, wages and supplies—do not aggregate, in these days of thirty-thousand-kilowatt units, over one cent per K.W.-hour for steam-made, or one-half cent for water-made current. Yet a usual price to the consumer is seven cents. The author pays ten!

If he uses less than a certain minimum he is charged more than that. The only excuse offered is the necessary interest upon plant involved, and that, if the price were dropped, the traffic would no longer be paying all the dividends it could bear. This excuse has been given to the author literally, by an official of the electric company.

The apparent paradox here, however, is not a real one. The benefit to society derived from the circulating securities lies wholly in the fact of public confidence in their value, and not at all in the fact that they bear interest. That is to say, as accepted tokens of embodied life-support they energize a community, as does any other token-money in which it believes; but to their efficiency in this capacity their interest-bearing feature is no aid, *but a direct and growing bar*—except as a widespread public delusion connects the two.

Deferring further explanation of these statements, which are inserted here merely to show that the author has full cognizance of all the functions of interest-bearing securities, the topic of interest may be closed with the sweeping statement that the further investigation proceeds the more plain will it become that *whatever value to the community may lie latent in capitalism, the community itself long ago created it. As a matter of actual historical fact, every commercial and industrial appliance in this land has long ago been paid for, in cash, by the Ultimate Consumers in aggregate. Many of them have been paid for more than once.*

Before the reader resents this idea too quickly he should take careful thought as to what each successful commercialist may have been letting slip from his grasp, *in the form of his proper share, as a Consumer, in all other industries,* while he has been acquiring ownership over his one. Let him consider well the illustration of the six grocery-stores.

And let him note well that no particular public policy based upon this fact is here urged. But the author would fail in his scientific duty most pitiably if, after promising a review of the modern economic tendencies, he neglected or feared to state the indubitable fact that, in equity, all industrial appliances have already been bought by the public of Ultimate Consumers —not the public of voters—for cash paid in the past, yet without a shadow of title having yet been transferred to the public.

CHAPTER XIII

THE IRREVOCABILITY OF INTEREST

(NOTE.—This chapter should properly follow Chapter XX, upon Unemployment, because many of the positions taken in this present chapter rest upon proofs given in Chapter XX. Therefore judgment should be reserved until Chapter XX has been read.)

IT may not be clear from what has preceded that, however inequitable interest may be in some cases, it is always inequitable. That is to say, although it may have been proven that the *origin* of interest is always inequitable, may it not also be true that its *destination*—its devotion to a good cause (since so many charitable institutions are supported by interest)—may be capable of canceling the shame of its birth? Cannot the recipient of interest so spend it that the thing becomes good?

It must be obvious, at the start, that, even if interest be expended by the capitalist in an ideal way, for pure philanthropy, the good could not conceivably overbalance the wrong done in its origin. Even when spent for sheer altruism, has the capitalist any right to extort money from the Consumer by force for this purpose, rather than to leave the question of altruism to the original possessor of the money, to decide it for himself?

These questions may arise in many forms, only a few of which can be debated here. Some of these instances turn upon the question of size of interest-income. Are not small commercial incomes harmless?

For instance, over half of the total wealth of the nation (on which, later on, our estimates of the aggregate interest-payments for the nation must be based) consists of what the census calls "real property and improvements." But this includes, along with the big, valuable, money-making sites and buildings, all small farms and their houses, and the modest homes of many wage-earners. It may easily seem preposterous to classify all the current payments of rent for these—or the mere avoidance of such payments, where the tenant owns his own house and land—as "commercial combat" or "dissipation of economic energy."

Again, many wealthy people enjoying an independent income from interest or dividends devote some or all of their time to charity of various sorts, or to the direction or support of eleemosynary institutions. Most universities are supported chiefly by interest upon endowments, rent, etc. Hospitals, asylums for the blind, or for orphans, or sometimes for the insane; art-schools, museums, research-laboratories; "foundation" funds which have accomplished wonders in the conquest of disease, etc.—all these usually derive their support from contributions by those who receive unearned incomes.

Can all these exertions or payments be classed as useless or harmful? Must they not be made in some form in any event? When the factory-system shall have come into complete adoption, as is urged herein, must we not still expect to accord to all these respectable, generous people an income at least approximating what they now enjoy, if great ethical injustice is not to accompany our attempts at economic justice?

These questions are most important ones, and are not to be answered in a word. Indeed, the answer can be completed only later. But at least an outline of what that reply is to be, is appropriate here.

Briefly, as we replied to wage-earners doing useless things, the test of value to the community is not the source or form of pay, but the thing done. We shall show later that the bulk of all these charitable efforts is but a by-product of the main commercial circus. It is artificial and avoidable.

Small Capitalism.–Consider first, from the viewpoint of social justice, the small farmer or factory-hand who owns his own land or house, interest on the valuation of which stands charged in our tables as a factor in commercialism. Such a person does not actually receive interest-payments at all; but he charges enough for his produce, if a farmer, to cover such payments, in addition to what he would have received as pure wages had he not owned the farm. Or, if a wage-earner, he really gets, as net wages, this same amount above the wages of his fellows; because out of their wages they must spend for rent an equivalent to his interest on his home, before they can buy those other comforts of life for which all the wages of the home-owner are available. How is this sort of interest inequitable?

As a mere matter of comparative income, his receipts, *relatively to those richer than himself,* are not inequitable. For even with his interest added to his wages he probably still receives less than the true value of what he produces.

But our quarrel is not with the size of his income, but with the present manner of its distribution to him. For this ensures that, *relatively to other wage-earners who enjoy no property,* this interest on his small home represents sheer inequity. It has developed in him *a sense of differentiation from his fellow-citizens, a supercilious misunderstanding of the non-owning citizen's position in life,* which is to-day our greatest ethical bar to true democracy and social stability.

The fundamental error having once been made, of paying to both the owning and the non-owning producers wages less (in purchasing-power) than the value of what they produce, this error is not to be corrected by partially making up to one of them the deficit in the form of interest. One cannot unscramble the eggs.

Economic Ethics.—The modern economic situation is this: That there is constantly flowing from all Ultimate Consumers, whether owning property or not, a great tide of interest and dividends into the pockets of certain other Consumers, all of them owners of property—some of them big enough to gain by the plan, but most of them too small to receive as much as they pay; and this tide, which is justified neither by reason nor sentiment, constitutes always an economic and ethical leakage of good human energy into the sands. It is as a mere incidental feature of this tide that small portions of it, on their way to soak the sands, eddy temporarily into and out of the pockets of various producers who own small properties—tending to make of them cheap snobs, without the dignity often accompanying real wealth.

This frame of mind is undoubtedly worse in the horde of petty property-owners than in the fewer big ones. Because the little ones are many, this undemocratic and unchristian frame of mind becomes important. This widespread ethical result of petty commercialism stands as one of fate's direst threats against this country's continued prosperity and stability.

For most of the problems of the day are debated by the wage-earners with a keen, just sense of the equities involved which is not much excelled by the educated classes. Also, many big commercialists are sincerely patriotic and philanthropic, even to the point of condemning commercialism. But, on the other hand, on every issue which may arise this middle class of microscopic property-owners and employers has always reacted towards a narrow-minded, short-sighted, avaricious, timid or vindictive conservatism which is the full equivalent, in statecraft, to the tragic folly of loading weights on the safety-valve in a boiler-room.

This class is as penny-wise in its politics as in its business. We blame congress for both its penny-wise and its "pork-barrel" policies, but the real source of this evil lies in the constituencies, with the vast numbers of voters who receive petty interest, dividends and profits. In order to "protect their property" they become cheese-parers in all things—in ideas as well as economics.

It is such facts as these which warrant the statement that the aggregate of petty commercial incomes for the entire nation, however they may seem harmless because they are small, constitutes a loss of health to the body politic such as the fewer large commercialists cannot boast of being responsible for. Just as it will be purposely shown later, that the many little communities of the nation comprise a total population exceeding the aggregate for any one class of larger cities, so it may be stated that the aggregate evil due to the petty commercialism of the small property-owners actually exceeds that of the few big ones.

Income Versus Outgo of Interest.—There is another aspect of the delusion involved in the apparent innocence of small capitalism which has already been mentioned, but which may now be reduced to further accuracy by an anticipatory reference to statistics developed later herein. This is the delusion involved in overlooking the constant *payment* of interest across shop-counter, in greater volume than it is received through the banks.

Thus, according to Fig. 3 (page 475) and Table 45 (page 469), a household which spends $1000 yearly for all purposes, paid out across the shop-counter, in 1910, $293 in the form of interest to other people, merged in the prices of retail commodities. In 1920 it will probably be paying $324 of interest.[1] In addition, the incidental commercial costs of collecting all this interest, much of it in the form of profits, through such a cumbrous set of agents as the chaos of retail merchants, brings the total cost of commercialism to this household up to $465 for 1910, and probably $504 for 1920.

Thus, if this household enjoys savings or investments which bring in 6 per cent, it will require from $5000 to $5400 of such *before the income and the outgo of bare interest alone is balanced to a net zero,* or of $7800 to $8400 of investments before the commercial game as a whole is canceled to a dead heat—neither gain nor loss—for this family!

In other words, a household whose accumulated wealth is growing only at the rate indicated—a $600 increase per decade—*is only just standing still in prosperity.* If its savings increase at any less rate than this, it is actually growing poorer and poorer all the time!

Or if, in order to acquire that security against old age which the commercial system hopelessly denies, it has placed its reliance upon government-bonds, paying only 4 per cent, then all these figures must be increased by one-half![2]

[1] These estimates for 1920 are not based upon the data accumulated since 1910, but solely upon the general trend of events from 1840 to 1910. The indubitable acceleration of this trend by the great events since 1914 does not show in these figures.

[2] This estimate as to the depreciation of small properties with time (when measured in purchasing-power) does not include all of the factors in that rising cost of living which is daily making every poor man poorer, but merely those comprised in the statistical tables quoted later, namely: the visible migration of human effort out of productive and into commercial avocations. But the cost of living is rising more rapidly than these mere factors measure. Yet we are forced to forego its exact measurement because these other factors, even if indubitable, yet defy statistical confines.

The advantage which the rich man possesses over the poor man, as prices rise, is not at all confined to the fact that the rich man can better afford to pay the higher prices. It lies in the fact that, *as prices rise the rich man, who owns plant and commodities, gets richer, whereas the poor man, who owns only money, gets poorer!*

The valuation of the rich man's property rises as its earning-capacity rises, and its earning-capacity rises as prices rise. But the poor man's property has no earning-capacity. It is merely a small magazine of stored purchasing-power, for tiding him over the inevitable rainy day;

This is the accurate, cold-blooded, statistical aspect of that familiar tragedy which is being enacted daily in our great land —that of the person or family which, in spite of industry, sometimes great skill, mutual devotion, sacrifice, and all but endless hope, "cannot get ahead." It measures somewhat the handicap hung over the heads of every immigrant and newborn babe, in contrast with the opportunities enjoyed by the "self-made" men of a generation ago.

It is not to the pecuniary gains of such petty capitalists as these that we object, but to the fact that, like the buyers of lottery-tickets, *they are losing when they think that they are gaining.* For there are few households where the annual expenditures do not exceed from one-fifth to one-ninth of the investments owned, and very few (falling under the doubt with which this chapter opened) whose savings accumulate more rapidly than from $60 to $90 per annum; and all of these are losers, for themselves and for society, by the interest-dividend-rent system, taken even in its barest pecuniary aspect. *Only the big fellows win more than even money at the commercial game.*

Yet the strange thing is that it is particularly this class of public opinion, consisting of the small employer or property-owner, which always opposes most virulently, or disdains most superciliously, all suggestions for an economic system better than the present one. Among the wealthy there is perhaps as large a proportion of broad-minded radicals as among the wage-earners. It is only the pettily well-to-do who are hopelessly narrow-minded, as a class.

Then the fact that income and outgo in the form of interest or profits may balance to a net zero, for some certain household, does not mean that that household is not a large loser indirectly through commercialism. It loses in dirty streets, crowded, disorderly cities, disease due to malnutrition and germs fostered at every point, and in the general degradation of our community-standards, as well as in rising prices. Thus the fact that some robber-baron's retainer of a thousand years

and as prices rise the purchasing-power of this little store dwindles and dwindles.

The household whose margin of savings is increasing only at the rate stated above is in fact falling steadily behind the increasing cost of living, in its stored purchasing-power.

ago might be able to boast that his share in the baron's spoils figured as large as what he had lost through the exactions of other barons, certainly would not pass to-day as a warrant for the feudal manner of charging all the traffic would bear—nor as proof that said retainer had not actually lost as heavily as any mere peasant who "got it coming and going"—when compared with a society freed from robber-barons.

Wealth and Charity.—Consider next the charitably disposed rich. Is the interest or rent or dividends which they draw and spend in charity, or in the administration of eleemosynary institutions, a true economic loss?

It is. Consider well the sources of the demands for their charity or administrative skill. Defer your judgment until you have read the later chapter herein on Unemployment, revealing it as a fruit of commercialism. For it proves that nine-tenths of all the flotsam of life which drifts into these institutions of various sorts—hospitals, prisons, asylums and retreats of various sorts, and including with them all healthy youth needing extra-parental aid toward an education—can be traced as being forced into this position or condition by the steady, blood-watering pressure of commercialism upon the state. They are there because of the modern impossibility of buying life-support at its natural price. *In proportion to each dollar returned to the help of these needy ones by the best intentioned of the rich, the latter's total income* (*and the losses to society incidental to the manner of its getting*) *have extracted from these same needy ones certainly two, and perhaps five or six, good dollars!*

Those pitiful and disgusting human wrecks which these kind-hearted rich attempt so vainly to comfort, resuscitate or reform —those empty shells of life which drift aimlessly with the tide along the sea-floor of life, rolling from one eleemosynary institution to another, on their way toward final dissolution—all these were once (in possibilities latent within their ancestors, if not in their own bodies) animated with a vital fluid which has gradually been sucked from their veins by commercialism. These animated corpses may be as hideous as dead flies; but it is that institutional spider, commercialism, and not the flies themselves, which is chiefly responsible for their ghastliness.

Strange and unbelievable as it may seem at first blush, it is yet indubitable to anyone who looks beneath the surface, or who will withhold conclusions until this analysis has been finished, that *it is those inside the eleemosynary institutions who, as a class, are supporting—or who in the past, as individuals, have supported with their life-blood now gone—the wealthy patrons of the institution, and not the patrons who support the inmates.* It is in the past gradual outpouring of the many little funds of life stored in their incapable bodies, minds and souls, as they kept up as long as possible the expenditure of money and energy while they slowly lost their hold on life, that they maintained their contributions to that vast tide of profits, and of commodities purchased with profits, which is being currently sucked from every city-tenement, country-village and isolated cabin in the land, to be absorbed by the commercial world of antagonisms, profits, dividends and luxurious purchases. Biologically speaking, commercialists do this much as scavenging lobsters collect from the most revolting carrion, as a source, the nutriment which graces our tables as our most highly esteemed delicacy.

While the reader will naturally be reluctant to believe this statement without proof, it is obvious that the proof cannot be completed until the analysis to which this book is committed has been finished. Yet it is necessary, in order to round out our outline of the true nature of interest, and to explain why all interest is included as alike in its destructive essence, to insert this statement at this point. If the reader has followed our opening argument at all, it has become obvious that the bulk of all interest is economically, if not morally, destructive. As we gradually trace this basic fact into its utmost ramifications, throughout society's modern intricacies, it will become more and more plain that, whatever may be its magnitude, all funds transferred in the form of interest work waste and destruction, both economic and moral.

Interest is fundamentally wrong. The effect of an economic lapse from equity can no more be converted later into a constructive influence, by any manner of economic or moral atonement, than a misaimed bullet can swerve, after leaving the muzzle, to hit the mark.

The Transfusion of Economic Energy.—Whatever may be the kindliness of heart which may direct the expenditure of interest, once abstracted from the Consumer, it is forever debarred from returning that life-blood, which it disseminates so charitably, to the arteries whence it was originally tapped. Indeed, it is debarred from ever returning to any destination whatever more than a small fraction of the original abstraction, so much is lost on the way!

The physical transfusion of blood may be practicable and profitable in surgery; but even there it is but a poor makeshift for healthy, normal life. In economics it is equally an abnormal, undesirable process, not to be regarded by any patriot as other than a dangerous makeshift—to be relied upon for the bare maintenance of civilization's life only until a more normal and wholesome metabolism may be set up.

Every self-respecting and wise community should see to it that it needs neither the original abstraction of interest from the veins of the Consumer, nor the charitable return of a small part of it to human derelicts later. For all that is needed, in order to avoid both, is full faith in that factory-system upon which our entire material prosperity has been reared, and which every businessman enforces without stint or qualification, in every portion of his jurisdiction.

Charity.—The ineffectiveness of charity, as an ameliorator of the social sores due to commercialism, may be illustrated by the following data published by the New York *Tribune* Fresh Air Fund, and translated by us into the form displayed here. The population referred to in Table 12 is that of the metropolitan district to which such an enterprise would naturally apply.

The table shows well the futility of trying to return effectively through charity a part of what never should have been abstracted. It is an actual fact that the money collected for this charity in 1918, in the heart of our participation in the Great War, amounted to *over twenty times* that collected in the peaceful, prosperous year of 1878, forty years before. Yet, so rapidly had the need for the charity grown upon us in the meantime, through increasing congestion of population, and so oppressively had the cost of each vacation increased—both facts being due to the growth of commercialism—that the effectiveness of the charity has been dwindling ever since 1892, when it reached its maximum of 424 vacations per 100,000 people needing them. By 1918 the effectiveness had fallen to one-third, and in 1916 to one-fifth, of this figure.

TABLE 12

THE INEFECTIVENESS OF CHARITY, 1877 TO 1918

Year	Money Collected per 100,000 of Population	Cost of Each Child's Vacation	No. of Children given Vacations per 100,000 of Population	Year	Money Collected per 100,000 of Population	Cost of Each Child's Vacation	No. of Children given Vacations per 100,000 of Population
1877	$10	$3.12	3	1898	$402	$2.51	160
8	167	2.77	56	9	459	2.66	172
9	326	2.71	120	1900	424	2.76	155
1880	406	3.35	121	1	548	2.97	184
1	373	2.56	145	2	495	2.76	179
2	927	3.80	243	3	501	2.84	176
3	618	3.50	176	4	446	2.75	162
4	735	3.00	245	5	489	3.15	167
5	738	2.98	247	6	465	3.40	137
6	889	2.89	297	7	524	3.64	144
7	777	2.94	284	8	615	3.87	159
8	843	2.34	359	9	722	4.71	150
9	783	2.41	324	1910	829	4.73	175
1890	719	2.12	338	11	743	5.11	145
1	816	2.06	394	12	698	4.37	160
2	775	1.82	424	13	638	4.53	141
3	710	1.92	369	14	640	4.65	137
4	585	3.24	261	15	629	4.56	138
5	492	2.47	199	16	428	5.84	73
6	810	2.38	239	17	754	5.95	127
7	615	2.59	237	18	831	6.85	121

Those who are interested in the evolution of the cost of living will find it noteworthy that the cost of each vacation reached its minimum in the year 1892. This is comparable with the date, 1895, which is roughly assigned in Chapter XIX, on the Cost of Living, as that when prices in general reached their minimum. This was the year when the waning effects of the Civil War in creating high prices had become overtaken by the waxing modern forces of commercial militarism in elevating prices, to a net result of rising prices from that date forward.

It is for all these reasons that all interest-bearing property will be classed, in the statistical tables to come later, as being inevitably, without regard to the size, use or destination of the interest, *a source of loss of one sort or another to the community*—perhaps of mere material welfare, perhaps of bodily perfection or moral stability, perhaps of mere poise and perspective in viewing questions of social justice, or perhaps finally of crass life, liberty and hope of happiness. The mere fact that productive activity, on the one hand, and combative or passive commercialism on the other, are often found merged within a single individual, often of most modest exterior and unimpeachable private morals, must never be allowed to confuse the mind as to the diametrically opposite natures and results of the two social functions thus merged and confused, namely: the constructiveness of the productive effort on the one hand, and the dire destructiveness of the commercial function, on the other.

CHAPTER XIV

COMMERCIAL COMPETITION AND ENTROPITS

There now remains to be considered only one last class of weapons and tactics by means of which the purchasing-power of the Ultimate Consumer is diluted and distorted by the existing commercial system, namely, active commercial competition—with its pecuniary measure, called *entropits.* In the preliminary definitions this term was reserved to cover incomes acquired by active effort in commercial combat over price, ownership, market or opportunity, called commercial competition.

Entropits are contrasted with wages not by the form in which they are received, nor by whether they are paid by an employer-owner, or not, but *solely by the aim of the activities expended in earning them.* On the one hand, effort productive of life-support for the Ultimate Consumer brings true wages. On the other, that exerted in competition over opportunity for, or price of, interchange brings entropits.

Entropits is contrasted, on the third hand, with interest or dividends in that the latter are acquired by *passive and continuous* ownership, whereas entropits come from *active and changing* ownership.

Exact demarkation between the relative quantities of these two sorts of income in the community is sometimes obscure and difficult, because none of our sources of statistical information have yet set themselves the task of illumining it. The statisticians seem to fail to perceive the basic importance of the contrast involved. But usually the distinction, resting as it does upon the welfare of the Ultimate Consumer, is easy. It is nothing like as difficult, for instance, as the distinction between the alleged destructive or beneficial effects upon the consumer of alcoholic drink.

The number of different ways in which commercial competition, with its earning of entropits, may manifest itself is large, but the principal ones may be listed as follows:

(1) *Buying and Selling* in the personal sense of the term. Such is the activity of all ordinary tradesmen or merchants, in so far as they are not usefully maintaining necessary stocks; all shop-clerks and salesmen, in so far as they are not really aiding the Ultimate Consumer wisely to select his goods; all auctioneers, commission-merchants, jobbers, middlemen, speculators, peddlers, commercial travelers, purchasing-agents, brokers, etc. Even bankers belong increasingly to this class, in so far as they are active rather than passive financiers.

Such also is much of the activity of the housewife, or the superintendent of labor, both of whom are continually forced to waste an enormous aggregate of time and nervous energy in trying to select a place or brand of purchase, or to hire assistance, in the face of a complete lack of adequate guidance. Each is confronted, instead, by a babel of contending claims to superiority, all urged by interested and biased, and therefore superficial, conflicting and untrustworthy, advocates.

(2) *Advertising,* particularly in its special sense of a business or profession by itself, into which it has recently grown. In this sense it includes all who print, or who furnish paper, ink or presses for, or who distribute, advertising-matter, as well as those who write or publish it. It includes all posters, electric signs, sandwich-men, the bulk of all catalogues and calendars, and an endless variety of other schemes of amazing ingenuity, as well as the more familiar display-print which now fills the major portion of the space in all newspapers, reviews and magazines.

The distribution of real information as to novelties is a department of production, rather than of commercialism; but this is a very different matter from advertising. *All matter of real interest to the Consumer as to novelties is now welcomed into the reading-space as news.* Such are the book-reviews, notes of science or travel, consular reports of foreign markets, laboratory-investigations of foods, etc., or local items as to shipments of seasonal goods.

Advertisements, on the other hand, seldom concern novelties and seldom supply information. Most advertising concerns articles already long on the market. It seeks merely to impress upon the memory the name of a particular brand or seller.

The real contrast between advertising and news, in basic nature, is obvious from the strict line drawn between the two by all publishers, physicians, scientists and professional men of all lines and by the law. This is partly because of the moral opprobrium properly attaching itself to anything done for mere pecuniary gain, as contrasted with the motives lying back of all professional or craftsman's effort, and partly to the contrast in responsibility of statement coming from one interested only in the advancement of the race, as against one actuated solely by a share in expected pecuniary profits. So widely is it recognized to-day that all advertising statements must inevitably be largely misleading that the patience of the public in longer countenancing the costly system is quite incomprehensible.

(3) *Administration of Property* in the commercial sense of the function; that is, as contrasted with its superintendence in the productive sense. Almost all officials of corporations belong to this class, receiving their income usually in the form of salaries, dividends, divided cash-surplus, or securities distributed by "melon-cutting"; also many lawyers and receivers, whose income takes the form of fees. Under this heading also might come those promoters, speculators, real-estate dealers, etc., who hover about the line between this class and the first named one.

(4) *Banking and Finance,* in every sense except the routine duties of savings-banks—a function which enters in slight degree into all banking—but including the investment-activities of even the savings-banks. While it might seem that banking came properly under classification with capitalism, earning interest rather than entropits, yet modern banking includes also activities of the most combative sort, quite in addition to the passive function of earning interest. Indeed, it is just when the capitalist world's funds are invested and drawing interest that the banks have nothing to do with them. It is only when they emerge from investment and temporarily cease to draw interest, while actively seeking re-investment, that the services of the bank are required.

(5) *All Civil Litigation,* with its costly incidentals: judges, clerks, stenographers, experts, printers, etc., in addition to the lawyers, and including lobbying, readjustments, franchises, incorporations, contracts, patent-litigation, etc., but excluding the prosecution of applications for letters-patent. Even as to this

last item, many patents concern no appreciable invention, and therefore cannot be considered productive. They are sought covering only minute variations, as a basis for advertising a distinction where no real difference or improvement exists. Hence their prosecution must be classed with commercialism.

(6) *All Trades-unionism, Strikes, Boycotts and Labor-conventions,* in so far as they concern rates of wage rather than improved conditions of labor.

(7) *All Associations of Businessmen* for the control of prices, legislation or channels of trade, including the nominally social clubs which exist chiefly for the exercise of these functions.

(8) *All Transportation or other nominally productive Services* subsidized by any of the above, and thus distorted from useful to combative ends.

As one meets daily the intricacy and diversity of industrial and commercial life it will become obvious that the above list is illustrative rather than exhaustive. With this in mind each week's experience will uncover some new and unsuspected form of commercial antagonism over profits. But all of them, including the classification just given, boil down into effort directed toward one or another of the following general directions, namely:

(*A*) Excitation to Purchase, or Supposed Increase of Market-demand;

(*B*) Diversion to Self of the Profits from what Market already exists;

(*C*) Exaggeration of Profits by securing Special Privilege.

That the result of commercial effort amounts merely to a transfer to oneself of something which is not created by that transfer, but which must be lost by someone else to the degree that it is enjoyed by the one acquiring it, will be seen most easily in reference to Cases B and C. In each of these there is no evidence, nor scarcely any pretense, of any creation of the thing sought. When one man seeks a contract against several competitors there can be no delusion to the effect that his efforts increase the number or value of the contracts to be allotted. All his hurryings to and fro, his pulling of wires, his search for favorable influence, his careful watchfulness, leave the amount of business to be done just what it was in the beginning—one contract, and no more.

Similarly, when legislative favors leaning toward certain profit-making corporations are sought, there can be no delusion that anything is created thereby. What the corporations gain the people lose. No vague generalities about "creating opportunity" or "keeping money in circulation" can disguise that fact. The Consumers alone create opportunity. The people are quite capable of putting their money into circulation, without aid.

Does Advertising Increase Trade.—But when one turns to the first of these three sorts of commercialism, "Excitation to Purchase, or Supposed Increase of Market-demand"—which may be treated under the general names of advertising or promotion—the mind is immediately seized by life-long traditions as to competition being "the life of trade," or "advertising pays," etc. These sacred heirlooms of American public opinion may not be lightly disregarded.

Of course, if modern interchange is to continue to be organized (or to lack organization) as now, with trade permitted to occur *only after commercial combat has won the privilege,* then commercial combat must inevitably become not only most profitable, as an occupation, *but an absolute prerequisite to interchange.* The bull in this sentence is not accidental, but deliberate; for the average mind quite fails to see it, in daily life. It cannot perceive that of course advertising pays, if once it be permitted. Trade cannot exist without it—not because it helps trade, but because trade cannot escape its "tagging along."

But does the Consumer buy an atom more of stuff, or get it any cheaper or better, for all this modern marvel of ingenious, energetic and expensive advertising? Indeed, does he not actually buy far less than he otherwise would, if all this active "promotion" of business were omitted, and production, interchange and consumption were left to promote themselves by their own natural forces? Is advertising any more wholesome, as a steady diet, than any other artificial stimulant?

There can be no hesitancy in answering all these questions to the effect that every form of commercialism restricts, in some way or another, the natural volume of production, trade and consumption. While Chapter XI, on Economic Equilibrium, or "Charging All the Traffic will Bear," fully answered these questions in a technical sense, yet a more popular résumé of the situation may not be amiss.

The basic fact from which all argument must start is that *the Ultimate Consumer has only a given amount of money to be spent.* It is obvious that the advertising of shoes, for instance, if that be his want, cannot possibly put an additional penny into his pocket for the purchase of shoes; and that is the only act which can increase his aggregate purchases.

The person who needs shoes needs no artificial stimulus to enter a shoe-store. He will go quickly enough, if only he finds the shoes accessible in price after he gets there.

There is no use in making people *desire* shoes more, by attractive display, advertising, etc., if that same display, by its cost, makes them *harder to get.* It is not desire which moves the world of production, but *market-demand,* measured in money actually spent; and market-demand, when measured in commodities, depends upon the purchasing-power of what money the Consumer may happen to have.

Then what does advertising accomplish? If it is so useless, why does it persist?

The utmost that advertising may be expected to accomplish, even by its most enthusiastic advocates—and even that is not fully realized in practice—is merely that *what money the Consumer has to spend will be spent in the shop of the advertiser, rather than in a competitor's.* That is all. Not even the most ardent protagonist of advertising can ever aver that advertising increases the amount of money in the Consumer's pocket. Yet if, on the other hand, it can be shown to increase the price asked by one penny, then it *must* have decreased the aggregate volume of purchases.

If there were only one shop there would be no advertising. People would then be more fully informed as to what was in that one shop than they now are as to what is in the hundreds of competing shops. But that is because they would not rely upon advertising for the spread of that information. They would rely upon the news-columns of the public press, which are always wide open to *any matter which contains news-interest to the public.* It is because advertisements do not usually embody such interest that they are religiously excluded from the news-columns.

Advertising, like interest, is demanded by, is created for, and becomes profitable from no other cause than a discontinuity of ownership, or ownership-in-industry, where such discontinuity is unnecessary and undesirable. As competing businesses which previously were active advertisers against each other become consolidated, they cease this form of combat.

Suppose that a lady entering a modern department-store and inquiring for stockings should be met by a floor-walker who said, most politely:

> "Madam, there is an excellent stocking-counter on your right hand, and the young man in charge informs me that it is the best in the store. On your left you will find another excellent stocking-counter, directed by a young woman who announces most cleverly, each morning, that it displays the best bargains in stockings in the entire building. On the several other floors of this emporium you will find some eighteen other stocking-counters, each of which assures me daily that its stock and prices cannot be excelled.
>
> "Pray examine each of these counters at your leisure and feel perfectly free in making your choice. Then be thankful, as you do so, for the progressive and enlightened civilization which preserves to you so carefully the boon of full liberty in these matters."

Can you imagine the lady as other than replying, most indignantly:

> "Sir, I came here in order to conserve my time, strength and money by availing myself of your well-organized store and your experienced guidance. I now see that you have none to offer. I shall go to another store, where they maintain *only one* stocking-counter. For that one is sure to be equipped with everything to be found under the roof in the form of a stocking, and with no doubt as to price.
>
> "This one counter wastes none of its energy in trying to prove that it is better than others, *for no others exist.* Instead, it conserves all its energies for supplying the Consumer. There I can shop with a minimum of trouble and a maximum of efficiency, in selection from a full stock and free from anxiety as to price."

But the lesson taught by every department within a modern store cannot be learned, it seems, by the store as a whole. Nor can it be learned by the patrons. They cling tenaciously to their medieval privilege of having what they need scattered throughout a dozen stores.

The fact that a non-advertising shoe-dealer fails to sell shoes does not mean that shoes are not bought. His lack of advertising does not diminish, any more than the most active advertising increases, the aggregate volume of trade. If A advertises, it merely diverts trade from B's shop to A's. But if now B replies to A's advertisements with an equal cost and skill of advertising, the two are obviously just where they were at the start, as to relative proportion of trade. Plainly, it is only a relatively superior *rate of increase* of advertising which can win permanently, even for the dealer—the Consumer's interests being overlooked for the moment.

This explains why it is that the volume, energy, ingenuity and cost of advertising are all steadily upon the increase, and with acceleration in recent years. It cannot be otherwise. The dealer who stands still in advertising loses just as surely, if not so quickly, as he who does not advertise at all.

Yet our rate of production, per capita, has not been increased thereby, but decreased. The great modern problem is our increasing deficit in production (relatively to our latent normal productivity), while we cannot find sufficient supplies of paper upon which to print our rapidly and acceleratingly exaggerated advertising.

Advertising, like every other aspect of commercialism, has no more faculty for standing still than has a bicycle. Like slavery, or absolutism, or militarism, or any other oligarchy of specially profitable but wrong privilege, it must grow, grow, grow—so long as it exists at all—deaf to all protests from ethical or moral scruples, until it finally bursts, from its own inherent inflation of falsehood.

Trade Depressed by All Forms of Commercialism.—This whole situation was reduced to its lowest terms in the mathematical analysis of "charging all the traffic will bear." So far as effect upon the purchasing-power of the Consumer is concerned, and hence upon the general volume of production and trade, it makes not the slightest difference whether the charge which sags traffic be incurred in the form of rent, interest, entropits or contributive costs of competition, including advertising; or whether collected through the medium of an issue of new securities, a rise in market-price of old ones, the formation of a bank, an installation of additional retail-shops, a job secured as a drummer, a solicitation of advertisements, or a contract for printing gaudy calendars. Each and every one of these acts has the sole effect, so far as the advancement of trade is concerned, of *reducing it*—so far as the local effort in question bears any weight whatever—by from seventy to eighty per cent below what it naturally would have been.

In this simple fact lies the gist of why it is to-day that, with incitements to purchase such as have never before been seen, as to ingenuity, brilliance, cost and ubiquity, there prevails at present *an irregularly decreasing volume of purchases per capita,* in proportion to productive possibilities; yet at the same time a rising problem of unemployment. The two phenomena are both the result of the same cause—an increasing intensity of commercialism (in which advertising constitutes one of the most costly features) with its resultant increasing loss of purchasing-power and hiring power in the Consumer's dollar.

Advertising as an Educator.—It has already been made plain, from the most basic considerations, that advertising does not, and cannot, increase the aggregate volume of trade, but rather that it decreases it tremendously. But is it even true that advertising incidentally performs, even if at undue cost, the one service for which it is universally credited, namely, the education of the people as to current novelties? It will promptly appear that it does not.

In the first place, the bulk of all advertising relates to goods which are no novelties at all, but the worst "has-beens" on the market. That is the reason, indeed, why, under commercialism, they must be advertised. Without it they would have long been forgotten in preference for later brands.

Or, if they be really as good or better than the later comers, their quality, if commercial competition be the fair arena of just dispute which its advocates urge, should have stood for itself. How about the silverware established in 1847, the whisky made since 1820 and "still going strong," or the pictures of colonial dames buying a certain brand of soap in the tiny, dirty shops of that day? Why do we need such frequent, insistent, impertinent and costly—nay, frantic—reminders of these, if they have so long been recognized as good?

The plain answer is that the commercial system offers the largest inducements to the newcomers to come as near to lying, or at least misleading, the public about the old as the law will allow. The same inducement is offered to the old to reciprocate. But, in the name of common sense and the factory system, why not force each newcomer to undergo examination by impartial experts hired by the Consumer, and each predecessor to abide by the result, and then let it go at that?

Why must we have the valuable space which confronts the eyes of millions, during the tedium of a subway or elevated ride, devoted to displaying pictures of people in their underwear, or to announcing disgusting remedies for constipation? In all of the repudiations of public ownership by those receiving comfortable incomes from private ownership, in all the defenses of advertising as a valuable means for educating the public, no mention is ever made of the inconceivable value of this space in the cars—now lost to us by commercialism—for apprising the public each morning of the latest world-news, or the last scientific discovery, or the records of the previous day's sports, or the arrival of early fruit from the south, or the latest design of gown or bonnet, or last evening's hit at the theaters; or even for entertaining them with "comic sup." nonsense, if nothing better.

For the advantages of private ownership, like those of slavery, militarism or any other autocracy of special privilege, are single, concentrated, organized and cogent, namely, pecuniary profits. But those of public ownership are as broad and scattered, as unorganized and impotent of expression, as are the millions to whom its benefits accrue.

Or, as to the truthfulness of advertisements, why is it that when they are afraid to lie outright they always mislead or deceive most skillfully, by half-truths or by omissions? Why is it that, when that portion of the public which has no children, and no interest in children's diseases, is forced to buy pages of newspaper each morning, or to stare at posters by the hour, urging one to buy soothing-syrup of "the kind you have always bought," the advertisers cannot even be frank and truthful about it, after all? For the brand now advertised as such proves to be not that which was familiar in every nursery a generation ago, but *another which bears a name so similar thereto that the careless ear will accept it as the same.*

Both the cost and the "value" of such an advertising-campaign as that is measurable in hundreds of thousands of dollars —all paid by the Ultimate Consumer. Yet its sole aim is to mislead the public—and that on a point of no importance to the public, after all.

Even of goods appearing recently, how can it be that a certain brand of chewing-gum which has been brazenly thrust before our attention during the last few years, until we have been forced to give it an amount of attention sufficient to have educated millions as to the precession of the equinoxes, still needs announcement? And why is it that this most costly announcement of the important arrival of a new chewing-gum years ago, has quite neglected, to date, after a myriad of reminders of the charm of a pure leaf-flavor in gum, to state positively that there is any leaf in the gum at all, or that it is exclusively flavored with pure leaf? That is what the public is expected to infer, of course; but committal statements are carefully avoided.

These are all facts so painfully near the surface, the instant one pleads "education as to novelties" in defense of advertising, that it is hard to preserve faith in human sincerity and sanity in the face of such a plea. Announcements made for no other motive than the private profit of one who did not make the thing advertised, who has no workman's pride in its excellence, who usually knows nothing about the details of its manufacture, and who deserves not the slightest credit or reward therefor—concerning commodities which are manufactured in huge quantities by machine-processes, with the labor-element reduced as nearly as possible to that of a slave under a hired overseer, and then sold under the name of a man whose individuality has long ceased to be connected in any way with the product—do not contain information of value to the human race. Progress in human knowledge must look to quite other aids than that for its dissemination.

Because of our vow to refrain from muck-raking we omit all debate of such advertising as that of patent medicines, where machine-made remedies bear the name and likeness of persons now long dead, backed by references bought from dummy beneficiaries. All such advertising as that crops out, not as a thing originating with mendacious human nature, but as the quite rational and inevitable result of permitting income to be received in the form of profits induced by advertising.

Advertising as a False Stimulant of Journalism.—The recent mushroom-like growth of our periodical publications, under the artificial stimulation of income from advertising, and its detrimental effects upon our journalism and upon that phase of public education which must rely upon journalism, will be treated later, in connection with the topic of the freedom of the press. For the present, debate must be confined to advertising itself, as a matter of economic rather than ethical importance. For its recent marked acceleration constitutes one of the many evidences that modern civilization is sliding sideways off the true path, temporarily, instead of advancing directly forward.

When our real and growing social instability has come to be revealed by accidental stress, as it surely will be, one of the gravest tokens of the degree to which we have been hiding our head, like a timid ostrich, in the commercial sand, is the way in which our money available for reading has been systematically wasted upon advertisements of things which are not novelties, and which we do not want. Our heaviest and most dangerous weight upon the social safety-valve of free speech, we shall find, is our journalism privately owned for dividends, and entrusted to so unnatural a foster-parent as income from advertising for its support. Its shameful prostitution to a promiscuous intermingling of advertising with reading matter follows from that as a natural result.

The Fetich of the Twentieth Century.—When future centuries shall have written their histories of the present one, the motto assigned to that extending, say, from 1825 to 1925 will be nothing so beautiful as Grecian art and philosophy, nor so dignified as Roman law and discipline, nor so inspiring as the religious fervor of the Crusaders, nor so mystic as the glamour of medieval chivalry, nor so thrilling as Elizabethan adventure over unknown oceans, nor so solidifying as devotion to democratic ideals in the face of enthroned tyranny, such as have demarked earlier centuries. Instead, our present world-motto, which we are never permitted to forget amidst higher things, will be emblazoned for all times: "It pays to advertise!"

For never during these earlier centuries has there been any one institution which has grown so steadily, we shall find, nor which absorbed so large a portion of the people's energy, nor which accelerated at an equal rate, nor which even ruled with a heavier hand (when once the facts are understood), than that of modern commercial militarism, called "business." Under the magic spell of the gleaming grail called private pecuniary profits, our entire civilization has gradually been placed under feudal tribute to, and its destiny enslaved by, commercialism. Under the free license which it boastfully grants to all who care to enter the fight for profits, our best citizens—nearly always unconsciously—have become, *in effect,* irresponsible privateers at best, and at worst murderous buccaneers.

For our death-rates, recording tragedies the cause of which they do not explain, are now known to be subject to economic conditions far more than they are to current technique in biology or hygiene. Tuberculosis, syphilis, etc., which are perfectly understood biologically, are now recognized as being social, rather than physiological, problems. The death-rate, especially for infants, and the price-index rise and fall together.

Our modern cities have amassed absurdly congested populations. Sickening slums fester beneath the noses of an aristocratic, quasi-military oligarchy, quite as medieval filth besmirched the similarly superficial glitter of that day. Towering skyscrapers have shot up like fortresses overlooking cañons, overawing the passing traffic into all the tribute which it can bear, exactly as medieval battlements did the same with crossbow and men-at-arms. Speed, noise and insincere display have become life's highest standards—all at the call of the god of war-over-profit, now unshakably enthroned as our all too golden idol. To write a political economy without some reference to all this in our tables of statistics would be criminal.

For never was an idolatry based upon a more hollow or, in effect, a more cruel superstition. The office of science is to unmask it, as truly as it was, five centuries ago, to face the stake in exposing the corruption of the religious orders of that day, or in announcing the correct theory of the solar system. When the reader once understands that the horrid Inquisition of the sixteenth century was largely a money-making institution, the estates of the condemned heretics being confiscate to the church, with a "rake-off" for the witnesses testifying against them, he will better understand the parallel between the inability of the wholesome human nature of that day to make progress against its cruelties, with the impotence of modern democracy in the clutch of modern commercialism.

But we might at least think straight. Yet the subservience of simpler folk in earlier times before deities of wood, metal or cassock, in superstitiously conservative beliefs which forced them into the most cruel of blundering sacrifices, surpasses not one whit our modern national superstition as to the sacredness of commercialism. For our factories, offices, schools, churches, universities, legislatures, judiciaries, editors, commissions and presidential cabinets—all alike are ready to throw themselves prostrate, in their every official act, before the quite unreasoning belief (unfounded upon fact and defiant of the impressive success of the factory-system) in the necessity of stocks, bonds, profits, dividends, ownership-in-industry and commercial competition, as our social cornerstones.

Each of these officials thanks God for our sacred liberty, purchased by the blood of our forefathers and conserved to every man by our Constitution, to buy anything in sight (although having no desire to consume it) at the lowest price which he may be able to enforce, and then to sell it (usually to someone equally lacking interest in the thing itself) at the highest possible price—by which act he has visibly accomplished nothing better than to make the higher price do what the lower price would have done without his officiousness. Actually, but invisibly, he has done far worse than that. He has undermined our whole modern structure of democratic liberty. He has planted the mine which is destined to blow, temporarily, our every American constitutional right and liberty out of our reach. But not one of these officials can be persuaded to recognize that fact.

PART III

DATA

CHAPTER XV

RECENT ECONOMIC HISTORY

It is only when one has thus been equipped with a penetrating analysis of the mechanical relationships prevailing between one part of society's activities and another, such as has now been completed in outline, and with at least this preliminary glance at the resultant relations between economic cause and ethical effect, that one may for the first time become competent to read American economic history with a comprehending mind. Without this nothing can be seen in proper perspective.

According to this perspective, the first responsibility resting upon every teacher of sociology is for the tracing of the growth of commercialism, and of all its possible effects. In order to do this with accuracy, through the statistical data with which our libraries are overcharged, and in particular through the reports of the United States census, this present review of the economic progress of the last two generations is here resumed in statistical form.

Per-Capita Data.—As to program, first is to be noted the rate of growth of net material life-support, and other quantities, *per inhabitant.* Mere statistical aggregates are blinding and misleading. What each person needs to know is the degree to which each average citizen is affected, in this direction or that, upon the average—discounting increases in poulation and the like.

Directions of Progress.—Secondly, which way are we going? Are we really getting richer, or poorer, in the supplies reaching each person, on the average; or is it merely that we feel poor? And if so, why? Are prices high because there is a smaller supply per capita, or for some other reason?

Rates of Growth.—Finally, what have been the comparative *rates* of progress of our basic economic phenomena? What have been the relative rates of growth upon us of the national factory-system, which has produced all our material wealth, on the one hand, and of that commercial militarism, on the other, which has prevented our producing more?

For, in the development of social crises, it is *time* which is the one all-important factor. Events occur without our expectation. Reforms which might have been remedial a few years earlier have become impotent by the time they have been accomplished.

Yet this factor of time, or rate, is so commonly overlooked. So many good people debate our public problems as if they were stationary, so that, if we made ever so little progress toward their solution, we must eventually solve them. They reason as if we had untold centuries in which to nibble at things. They forget that a social crisis has as definite a rate of gathering as has a thunderstorm. Most of the social remedies now advocated are about as wise, for effective reform, as would be the commencement of plans for a stone-house, for shelter, after a thundercloud has been begun to gather. Others make the mistake in the opposite direction—of raising an umbrella to ward off an avalanche.

Therefore an inquiry of the utmost importance is: How *rapidly* is this economic situation growing upon us? When we know, fairly accurately, both rate and direction, then, and not before, shall we be equipped for prescribing remedies with some hope of effectiveness.

Density of Population.—A few trite facts must be re-stated at the start. Thus, we all know that our population has grown tremendously; and our territory also, until recently. But of late further territorial expansion has become impossible. Since density of population lies at the very base of many economic conditions, the exact facts as to this are needed first.

Table 13 shows, in regard to this, that during the first half of our national life the mean density of population remained substantially constant, between five and ten persons per square mile of political area, and between ten and fifteen for the area coming under enumeration. During this period both territory and population expanded in parallel. But by 1849 the tide of western migration had touched the Pacific Coast, and thereafter the density rose rapidly, reaching in 1915 some six times the figure for 1820, for political area. The density per enumerated area of course increased less rapidly.

TABLE 13

Population and its Density, 1790 to 1915

Year	Population	Density, Inhabitants per Square Mile of	
		Political Area	Enumerated Area
1790	3,930,000	4.5	9.4
1800	5,310,000	6.1	12.2
1810	7,240,000	4.3	13.0
1820	9,640,000	5.5	14.0
1830	12,870,000	7.3	14.7
1840	17,070,000	9.7	14.4
1850	23,190,000	7.9	15.2
1860	31,440,000	10.6	16.1
1870	38,560,000	13.0	18.1
1880	50,160,000	16.9	18.4
1890	62,950,000	21.2	21.2
1900	76 300,000	25.7	25.7
1910	92,000,000	30.9	30.9
1915	(est.)101,000,000	34.0	34.0

The Drift from Agriculture to Technical Vocations.—We all know, also, that during our national life there has occurred a marked expansion of the mechanic arts and the technical sciences, at the expense of agriculture. In Table 14 appear the exact facts as to this, as shown by the basic classification of the United States Census Bureau.

In the earlier decades of this table occurs a discrepancy due to the fact that previously to 1870 only free males above the age of sixteen were enumerated, whereas on and since that date both sexes above the age of ten have been included. A second discrepancy is due to the appearance in the data for 1870 of a great mass of negro labor. But neither of these discrepancies vitiates appreciably the accuracy of any conclusions as to the growth of commercialism, because it is known that both of these additions to the enumerated population must have been originally almost exclusively agricultural and domestic in occupation. In 1860 a census of occupations was taken, but it was not classified by the census-bureau.

TABLE 14

THE NATION'S BROAD CLASSES OF VOCATION, 1820 TO 1910

	1820	1840	1850	1860	1870	1880	1890	1900	1910
Percentage of total population enumerated as to vocation	25.8	28.1	23.2	26.3	32.5	34.6	36.2	38.1	41.5
Percentage of enumerated population devoted to:									
Agriculture	83.1	77.5	47.6	....	47.6	44.3	37.7	35.7	33.0
Professional	....	1.4	3.0	....	3.0	3.5	4.1	4.3	4.8
Domestic and personal	....	....	18.1	....	18.1	19.7	18.6	19.2	14.0
Trade and transportation	2.9	4.3	....	....	9.9	10.8	14.6	16.4	19.9
Manufacturing and mechanical	14.0	16.8	....	....	21.4	21.7	25.0	24.4	28.3

The Drift from Domestic to Wage-earning Vocations.— The proportion of population enumerated as "occupied" has increased fairly steadily throughout the period covered. Since 1850 this increase has been unbroken, averaging 2.2 per cent of total population per decade. A correction for the negroes, separately estimated from slave-statistics in connection with Table 27, brings this average increase per decade down to 1.6 per cent.

This most noteworthy feature of Table 14 thus shows, not an increase in national industriousness, as might be supposed at first glance, but a steady drift of industry *out of the home and into the factory.* Not only were the bulk of those who later entered the ranks of the "enumerated" previously at work, in house or field, but there is non-statistical evidence to the effect that they were probably harder at work, and at an earlier age, than when they became enumerated as "gainfully occupied."

Most of those not enumerated in the earlier decades were housewives. In those earlier years nearly all housewives toiled incessantly, although not enumerated as possessing a vocation. Of recent years the descendants or counterparts of these housewives have many of them become idlers, supported by busy commercialist husbands, while many more have drifted from home to wage-earning in some factory.

These Drifts a World-wide Tendency.—That the United States is not peculiar in this general drift of vocations, although it doubtless leads, can be seen from the following figures for a portion of Germany in Table 15, taken from Werner Sombart's "Beruf und Besitz":

TABLE 15

OCCUPATIONS IN PRUSSIA, PER CENT OF "OCCUPIED"

	1843	1895
Agriculture	61.1	36.1
Industry	23.4	38.4
Commerce and Exchange (monetary)	1.9	11.4
Domestic service	(included in above)	2.1
Governmental, Clerical, Professional, etc.	5.0	11.7

The Decline of Agriculture.—The prominent feature of change in the United States is the decline of agriculture, from five-sixths of our industry in 1820 to one-third in 1910, and the corresponding rise of trade, transportation, manufacture, and mechanical and professional vocations, from one-sixth in 1820 to over half in 1910; and these same tendencies are observable in Germany, though less marked in degree.

The "Domestic and Personal" class of occupations alone has remained virtually unchanged, with us. Between 1900 and 1910 this class apparently dropped some 25 per cent from the average maintained during the preceding half-century, and this may measure truly the tendency away from domestic service and into the factory which has been commonly noted, due to the substitution of hotel and apartment life for separate homes. But further data are needed to confirm this view.

When one proceeds to analyze more introspectively the details of this blanket-classification of the nation's tendencies, no concomitant of this tidal swing away from agriculture is more marked than the growth of city-population at the expense of the rural districts.

Congestion in Cities.—One of the most obvious features of modern civilization, the world over, has been its rapid and intense concentration of population into cities. In the United States this tendency has resulted in the following rates of growth of urban population. The proportion of the aggregate population which had come to live in cities of over ten thousand people each, and the number of such cities, during the last seven decades, stated in per cent, is given in Table 16.

TABLE 16

Growth of Cities in Number, 1850 to 1910

Year	Per Cent of Nat'l Popula'n Residing in Cities	Number of Cities above 10,000 Inhabitants.			Average Size of Such Cities	Newark, N. J.
		Number	Per Cent Increase	Number per Million of Total Popula'n		
1850	12.2	66	. .	2.85	43,000	39,000
1860	15.0	86	30	2.82	54,900	72,000
1870	19.7	151	75	3.91	50,300	105,000
1880	21.5	201	33	4.01	53,600	136,000
1890	28.0	340	20	5.40	51,900	182,000
1900	34.6	394	16	5.16	67,000	246,000
1910	40.1	568	44	6.18	65,000	347,000

The marked acceleration in rate of city-growth between 1860 and 1870 is doubtless due to the Civil War. War is a great consolidator. The apparent drop in rate of growth between 1880 and 1900 is partly a true one; but it is also apparent only, due to the fact that in the census-reports for 1890 and later, groups of formerly independent cities were consolidated arbitrarily into single "metropolitan districts," without regard to whether they were politically consolidated or not. This was because such groups had come to be actual, if not political, unitary communities.

In some degree there has occurred political consolidation also; *but the essential fact is the physical consolidation by growth into contiguity, and by the annihilation of space by improved transit-facilities;* and this alone has been heeded in Table 16. The tremendous return of the real rate of growth in 1910, however—exceeding any of the earlier figures except that for 1860-70, which may not be accurate—is unquestionable; because the bases for comparison in 1890, 1900 and 1910 are the same, while the data are more reliable in detail.

In order to contrast the rates of growth of single cities with that of the average of a class, a single city—Newark, N. J.—is noted. This city was selected as being neither an exclusive center for a large territory, as are many of our larger cities, nor a remote agricultural town, nor one devoted chiefly to a single industry.

Distribution of Urban Population.—Not less important than the aggregate rate of growth is the relative distribution of urban population among cities of various sizes. To show this, six classes of size of city have been selected and the distribution of population between them shown in Table 17.

In this classification a set of limits of size different from that employed by the Census Bureau has been adopted. This is because the set of limits chosen by the census-authorities, namely, 10 to 25 thousand, 25 to 100 thousand, 100 to 250 thousand, etc., seemed unsystematic. According to this census-classification, one class would include cities ranging from a lower limit up to an upper limit four times that size; but the next class includes those within limits the upper of which is only 2.5 times the lower one. This is not an even method of subdivision.

To be fair, the upper limit of each class should bear to the lower limit a ratio which is the same for all classes. To meet this rule, and at the same time preserve the popular prejudice in favor of round numbers, there has been adopted for demarking the class-limits in Table 17, a ratio of upper limit to lower, in each class, equal to the *square root of ten,* or 3.162. That is to say, in each class the upper limit of population is just 3.162 times the lower limit. In each class the upper limit is just ten times the lower limit of the next class below.

With such a system of classification as that the population should be found to be distributed fairly equally between the several classes; and this Tables 17, 18 and 19 show to be approximately the case, whatever the total population or the number of classes. For any system of expanding limits for classes of city is based upon a crude perception of what we believe to be the fact, namely, that population, in its distribution, obeys much the same laws of fluid equilibrium that inanimate matter and energy do. Such a law would distribute the cities among the several classes *in inverse proportion to the size of city,* so that each class would contain equal portions of the total population.

TABLE 17

DISTRIBUTION OF URBAN POPULATION, 1850 TO 1910

Year	Per Cent of Total Population						
	Communities smaller than 10,000	Class A, 10,000 to 31,620	Class B, 31,620 to 100,000	Class C, 100,000 to 316,200	Class D, 316,200 to 1,000,000	Class E, 1,000,000 to 3,162,000	Class F, 3,162,000 to 10,000,000
1850	87.8	3.3	2.3	2.6	4.0	....	....
1860	85.0	3.1	2.8	3.4	1.8	3.7	....
1870	80.3	4.7	3.0	5.4	2.8	3.8	....
1880	78.5	4.7	3.2	5.0	4.5	4.1	....
1890	72.0	6.6	5.0	4.5	4.2	7.7	....
1900	65.4	6.2	5.2	5.0	5.9	6.2	6.0
1910	59.9	7.3	6.0	4.4	7.8	7.6	7.0

The conclusions enforced by these tables will embody some surprises to those whose concepts have been based merely upon the idea that we are running to larger and larger cities. For first, although population is undoubtedly gravitating steadily to the cities, as shown by Table 16, yet Table 17 shows that the process is still far from complete, and that the smaller cities are growing in number quite as rapidly as the larger ones are growing in size. While the portion of our aggregate population which lives in cities of over ten thousand inhabitants is to-day between three and four times what it was in 1850, yet it is still less than half the population.

Secondly, Tables 18 and 19 show plainly the tendency of population to distribute itself evenly, in fluid equilibrium, throughout the several classes of city. If it be true, as must be the case in any such fluid equilibrium, that the number of cities of any given size tends to be inversely proportional to that size, then the average size of city of any one class must approx-

TABLE 18

Average Size of City, 1850 to 1910

Year	Class A	Class B	Class C	Class D	Class E	Class F
1850	15,830	44,060	147,135	481,000	....	....
1860	15,640	55,500	184,200	580,000	1,169,500	....
1870	16,000	49,300	189 000	531,000	1,461,000	....
1880	16,030	50,000	190 000	565,000	2,026,000	....
1890	15,470	52,750	190,000	444,300	1,614,000	....
1900	16,800	51,600	174,500	500,100	1,570,000	4,608,000
1910	16,070	53,400	155,500	513,140	1,745,500	6,475,000
Average size	15,980	50,940	175,760	516,400	1,598,000	5,541,000
Geometric mean between limits	17,780	56,200	177,800	562,000	1,778,000	5,620,000
Arithmetical mean between limits	20,810	65,810	208,100	658,100	2,081,000	6,581,000

TABLE 19

Relative Per Cent of Urban Population in Each Class, 1850 to 1910

Year	If Population were Distributed Equally	Actual Figures					
		Class A	Class B	Class C	Class D	Class E	Class F
1850	25	27	19	21	33	....	....
1860	20	21	19	23	12	25	....
1870	20	24	15	27.5	14	19.5	....
1880	20	22	15	23	21	19	....
1890	20	23.5	18	16	15	27.5	....
1900	16.7	18	15	14.5	17	18	17.5
1910	16.7	18.3	14.9	10.9	19.4	18.9	17.6

imate the geometric, rather than the arithmetical, mean between the limits of that class. The lower portion of Table 18 shows plainly that this is roughly the case. Indeed, whereas the geometric is smaller than the arithmetical mean for each class, the average size of city is smaller still.

Table 19 is devoted to displaying this law in another way, namely, by the approximate evenness of distribution of the urban population between the several classes, regardless of the number of classes involved, or of the magnitude of the largest city. The first column (after the year) shows the percentage to be expected in each class due to the number of classes represented at that particular time. The remaining columns show the degree to which this theoretic percentage is approximated in reality.

Apparently this same law should hold true for the population living in still smaller communities than ten thousand inhabitants. If the classification were continued downwardly to include the smallest communities, the total population should be found fairly evenly distributed throughout all sizes of community.

But this evenness can be only approximate, for only six such smaller classes would then be required to bring the lowest limit down to ten persons, barely a hamlet. Since in 1910 only sixty per cent of the population remained to be accounted for in this way, the average per cent per class would thus be about ten. But this is considerably larger than the figures for the classified cities of Table 17. Therefore we must still regard ourselves as distinctly a small-community nation, in spite of our few big cities.

But in 1850, by this same argument, these six smaller classes of community must have averaged nearly fifteen per cent each, in contrast with only three or four per cent for Classes A to D; whence it becomes plain that fair progress has been accomplished, during the sixty years, toward this fluid equalization of population throughout the various sizes of community, from ten up to ten million inhabitants each. Yet it still remains true to-day that the bulk of our people live neither on farms, for agriculture is relatively on the decrease, nor in the largest cities, but in communities of medium size. Here lies the strength of the nation.

Average Growth Versus Individual Growth.—In order to appreciate this fact one must get well in mind the vast number of small cities or towns continually coming into existence through the growth of villages, and of villages through the growth of hamlets; for the mind sees only the obvious growth of this individual community or that, forgetting averages. Thus, compare the last two columns of Table 16. The last column shows the obvious in our modern tendencies—the astounding rate of growth of a single representative city, amounting in the sixty years to a thousand per cent! Yet the preceding column shows that the average size of city has grown during that period by but fifty per cent!

This does not mean that Newark is growing twenty times faster than all the other cities. On the contrary, Newark was chosen as an average city. Nearly every other city in the land is growing equally fast with Newark. Yet the average for all these cities rises only one-twentieth as fast as does each one of them!

It is because this puzzling paradox forms a close parallel with some other paradoxes to be noted later, as in the growth of business-concerns, that this paradox regarding cities has been brought out here. Modern tendencies cannot be understood without comprehending the naturalness of these apparent paradoxes.

In order to explain, let us consider the average, as contrasted with the individual, ages of a growing family. Imagine that a young man of twenty-four marries a girl of twenty, and that each three years thereafter the couple has a child. Each member of this family is constantly aging at the same rate, year per year. At the birth of each child each individual is three years older than before.

Yet does the average age of the entire family grow at a like rate? Not at all. Stating this average for successive three-year periods, beginning at the date of marriage, it runs as follows: 22, 16.7 14.7, 14.2, 14.3, 14.9, 15.6, etc. It first falls, because of the advent of infants of zero age, and then rises slowly, but at nothing like the rate of aging of each individual.

If this process be followed until the parents cease having children and perhaps die, and if all the families of a community be averaged together, then the average age of the entire lot will be found to remain constant, regardless of the lapse of time. Yet each member of this community is ever aging, year per year!

These paradoxes must be kept in mind when we look about superficially and see single cities growing apace, and solitary "trusts" expanding at a startling rate. We must not be deceived. The real tendencies of the land are not indicated truly by such isolated facts. One must look beneath the surface.

The World-drift into Cities.—This steady, ebbless tidal flow of population into cities characterizes modern civilization over the entire commercial world. It is no mere American freak. The cities of the old world are growing only less rapidly than those of the new.

This world-migration into cities shows not the slightest sign of being the result of any mere whim, nor of accident, nor of local condition, nor of form of government. No phenomenon of the magnitude and permanence of this vast migration may reasonably be attributed to mere notion, nor even taste, on the part of the myriads of individuals taking part; for they could not conceivably, by any of the mathematical laws of chance, be imagined as seized simultaneously with this same whim, nor of holding to it so tenaciously in the face of the obvious objections to life in a congested city. Any phenomenon of this controlling importance can be explained only by some force of a basic character, released simultaneously the world over, by the reactions of some institution as basic, as world-wide and as dominant as itself.

Migration Enforced by Commercialism.—There is only one international institution which meets these specifications, and that is commercialism. Wherever that is rife, or is a dominant factor, as is true of the United States and western Europe, there the congestion of populations in cities and the rise of the social problem is proceeding most rapidly, and to the farthest extreme. For this migration exemplifies upon a world-scale that same natural and inevitable tendency which was noted as becoming active in our imaginary modern factory, as soon as it had become permeated with commercialism or ownership-in-industry, namely, the tendency for the abler hands to drift away from the machines and benches of productive labor, and to gravitate into the more comfortable and lucrative vocations of commercial militarism.

For the country and the small town is the natural habitat of the plow, the bench and the machine-tool. The city is that of commercial combat. The cities grow and congest because, wherever militarism, whether martial or commercial, is given ascendency, thither the power and the money of the land must gravitate—the power going because the money does.

This basic motive force which underlies and compels this gigantic tendency of modern populations to congest in cities is best illustrated by a single typical instance which was reported by *Collier's Weekly* for Dec. 7, 1912. It concerned a farmer who had raised, picked, packed and delivered at the railroad-station, in baskets furnished by himself, forty-one baskets of peaches. These he turned over to the express-company to be marketed in New York City.

In due time he received a statement that his peaches had been sold—presumably not even then to the Ultimate Consumer—for $17.75. Of this sum $13.59 had been absorbed in "expenses," leaving to the farmer a balance of $4.16, or 10 cents a basket! Nor is this case an extreme one. We know from general observation that it is merely illustrative.

Now, of the $13.59 some small portion was legitimate expense of transportation. What the railroad charged we do not know; but the normal charge for the distance involved could not have been an appreciable item; and the natural, or factory-system, cost of transportation would of course be much less than the normal commercial rate. Then there was the wagon-carriage in the city. Altogether, the natural cost of producing and delivering the peaches to the Ultimate Consumer, if the farmer is to get only $4.16, could not have exceeded $6.00. They doubtless sold to the Ultimate Consumer for from $25 to $40. The exact figures do not matter just now.

So, of the money furnished by the real source of demand—the Ultimate Consumer—not more than from one-fifth to one-eighth went to those who, chiefly in the country, did some nineteen-twentieths of the work of placing the peaches in the Consumer's hands; while, conversely, from four-fifths to seven-eighths of the money went to those who, chiefly in the city. did all of the bargaining over the peaches, and all of the tribute-collecting effected by blocking the passage of the fruit towards its destination—while they incidentally did some one-twentieth of the natural labor of delivering the peaches.

That, in a word, is why the farms are being abandoned, the cities are being congested, and the cost of living steadily rising beyond control.

Editorial Acumen.—But the most significant—even the most menacing and tragic—feature of this incident lies in the fact that the only moral which *Collier's,* one of our most intelligent and liberal reviews, could draw from it editorially is this—which is quoted here because it expresses an idea all but universally voiced by educated laymen:

> "A good many people who live in cities and cannot earn enough there to buy peaches might well get up and go where peaches grow, which is also the place of fresh air, abundant food and wholesome living."

And which is also the place where, out of every twenty-five to forty dollars spent in the land, only four to six dollars ever reaches! And which is also the place where there is such a dearth of pay for work actually done, visible in crops rotting on the ground, that farm after farm has to be abandoned. And which is also the place where, while there may be an abundance of peaches rotting on one farm, potatoes on the next and corn on the next, of everything else there is complete dearth—where sugar, coffee, clothing, amusement, or even eggs, must be purchased with money at exorbitant prices; while money is the last thing to be had. *And which is also the place where there is already such a surplus of population that what they produce is already always far in excess of the city's ability to buy it!*

That is a fine place to recommend to people as an economic and industrial paradise! Why doesn't the editor of *Collier's* go there himself, without throwing away such a valuable pointer as that to the public—which of course, without his advice, could never possibly have devised so simple a remedy as that for all their manifest modern ills!

Social Involuntariness Again.—It is absurd, it is futile, it is downright silly and stupid, if not maliciously misleading, to preach to the people to flock "back to the land," without first assuring oneself that the money requisite for their support goes thither first. Is it one of these futile reliances upon a grade of human nature which does not exist, of which we radicals are so often accused, that we should really expect such an editorial staff as *Collier's* to advise first, and in no mincing terms, that the money *must* go to those who produce, and not to those who merely bargain or obstruct?

Or does this imply a faith and perspicacity which is too much to ask—a faith which perceives that when the money has been sent to the producer, the people and the production will follow the money automatically? Yet to accomplish this, all that is needed is a refusal to allow anyone but the Ultimate Consumer to own the appliances involved in supplying him with life-support.

The editors and professors of political economy have themselves migrated from country to city, just as sedulously as any other class, and for the same reason. It is queer that they cannot preach the truth about their own acts.

No theory of sociology can stand permanently which does not explain clearly the artificial force lying back of this insistent drift of the entire race away from its natural habitat, amidst vegetation and fresh air, towards the unattractive environment of a barracks-residence in an apartment-house or slum-tenement. Yet the really tragic aspect of this entire problem is not the thing itself—for the remedy for that is obvious—*but the complete failure of the best educated in the land to agree upon any accurate or consistent interpretation of it.*

For social problems which cannot be thought out must be fought out. This is our excuse for laying so much stress upon what might seem a most trivial and harmless editorial delinquency.

Growth of the Nation's Life-Support.—The question before the nation therefore is this: In the face of a steady trend of both population and ability away from agriculture and the allied productive arts, and toward the technical crafts or the commercial vocations of the city, just what is it about the change which has aroused worldwide discontent and created the social problem? Is it that we are actually less liberally fed, clothed and housed than formerly, however intensely we may be amused, dazzled, hustled and thrilled? Are our troubles physical? Or physiological? Or psychological?

Are we changing our human nature and becoming more envious and covetous? Is our present frame of mind the source, or the result, of a defective organization of society? Or is not all that is wrong with us a merely stationary condition of that organization, in economic matters, in the face of a rapid evolution of technical environment?

Is poverty due to a mistaken, but controllable, cultivation of the mechanic arts, at the expense of agriculture? Is the apparent growth in riches a mere myth, emanating from the shrinking value of the gold dollar? Is the situation gradually healing itself? Or is it steadily growing worse, revealing an instability of civilization which ensures ultimate catastrophe?

These are all questions at the very base of any economic philosophy, which seem to puzzle everyone; yet all are capable of answer by statistical investigation.

But to attempt to reach these answers through statistics as to either wages or prices is hopeless from the start; *for all wages and prices include within themselves the very questions asked.* Wages are high or low not according to the figure on the pay-envelope, but according to what they will buy. Prices are reasonable or exorbitant according to the pocket to which they are addressed.

Program of Analysis.—Therefore, the only practicable path of progress lies in a dual line of investigation, namely: First, the past development of our *actual supplies of life-support per capita,* without regard to price; and secondly, *the proportion of our currently available fund of industrial energy which has been absorbed in producing this life-support,* including its delivery at the only destination where it possesses any real value to the community, namely, in the hands of its Ultimate Consumer.

In measuring this human energy we need not, until later, concern ourselves with any perplexing questions as to whether it be brains or brawn which is enumerated. We need first a poll of *human beings,* classified according to the nature of their economic activities. After that has been accomplished it will next be in order to estimate the relative *productive abilities* of the various individuals.

But in none of this will it be relevant to debate whether these abilities have been abundantly or deficiently rewarded. It is only as the recipient of income turns Consumer that we may enquire profitably whether he is receiving, in commodities, his just due.

Outlining this program a bit more in detail, it calls for an investigation, as in the order of their relatively basic importance, of the following items:

1. THE PRODUCTION OF ACTUAL, TANGIBLE LIFE-SUPPORT—Food, Clothing, etc.—considered *Quantitatively per Capita,* regardless of wage or Price.

2. THE PROPORTIONS OF HUMAN ENERGY which are currently expended, going respectively to the Production of such Life-Support, on the one hand, or to Commercial Combat over its Ownership and Enjoyment when produced, on the other, including:
   - a. The relative *drift of population* from production to commercialism, and
   - b. The relative *caliber* of the various idividuals, productive or combative respectfully; and finally
3. THE RISE OF INCIDENTAL COSTS connected with this drift from Production toward Commercialism, including:
   - a. *Passive Capitalism,* as expressed in Interest, Dividends and true Rent, and
   - b. *Active Subsidization and Diversion* of what would otherwise have been productive energy into the purposes of commercial combat—called here *entropits.*

Forecast of the General Results of this Analysis.—The whole fruit of this investigation, it may be stated in advance, will be to show that not only are the people drifting steadily from production to commercialism, as measured by numbers, but also that those who migrate, like most emigrants, *average a higher and higher proportion of the country's energy and nerve.*

It will further appear that the actual drift from productive to combative vocations has been greater than the conscious migration visible in the direct statistics, because of the increasing numbers of those who, while still commonly regarded as productive because they receive wages for some art or craft, *have been hired and prostituted by the commercial combatants to produce for them, not life-support for the community, but munitions of commercial warfare.*

Yet the net showing will be that, in spite of all this migration away from productive vocations—so marvelous has been the increase in efficiency in our labor-saving appliances—*our average, actual, net supply of life-support per capita is still upon the increase.*

In other words, our troubles are not due to national starvation, as yet. *The relentless rise in all prices has no basis of explanation whatever in a decreasing supply.* The law of supply and demand is either not operative at all, or else, if operative, is over-shadowed by some force far greater.

Our poverty is not absolute, but relative. Our discontent is due merely to an unnatural disparity of wealth, and that disparity is not immediately explicable. Obviously there are other forces at work far greater than those of individual psychology. Except as the generalities which preceded this statistical investigation have given a hint, we have not yet identified these greater forces. But our prime object is to clear the way, first, of various obstructing misconceptions or economic superstitions which clog almost every educated mind to-day, in order that, when we reach the real explanation, it will stand out in proper clarity.

TABLE 20

FOOD-SUPPLY FROM FARMS, 1840 TO 1917

Year	Corn bus.	Wheat bus.	Oats bus.	Pease and Beans bus.	Rice lbs.	Butter and Cheese lbs.	Sugar lbs.	Potatoes bus.	Hay tons	Cotton lbs.	Wool lbs.	Tobacco lbs.
1840	22.1	4.97	.....	.....	4.75	.....	9.08	6.33	0.60	46	2.11	12.8
1850	25.5	4.33	6.32	0.40	9.28	18.1	10.70	4.49	0.60	42	2.26	8.6
1860	26.7	5.50	5.49	0.48	5.95	17.9	7.35	4.87	0.60	68	1.92	13.8
1870	19.7	7.47	7.31	0.15	1.92	14.7	1.13	4.28	0.70	31	2.59	6.8
1880	35.0	9.15	8.14	0.19	2.19	16.0	1.78	4.05	0.70	46	3.11	9.4
1890	33.7	7.43	12.85	0.15	2.05	16.6	4.78	4.15	1.06	47	2.63	7.8
1900	35.0	8.64	12.40	0.19	3.72	23.4	8.70	4.14	1.10	50	3.63	11.4
1910	27.7	7.42	10.95	0.20	7.48	21.1	18.01	4.87	1.06	46	3.49	11.5
1915	30.2	10.01	15.25	.....	7.96	.....	19.17	3.55	0.84	55	2.86	10.5
1917[1]	29.9	6.48	13.89	.....	18	.....	.....	4.32	....	55	....	11.6

[1] From Government estimates published early in July.

Evolution of Life-Support in the United States.—Life-support consists of many things, tangible and intangible; and some of the intangible things, such as recreation or religion for instance, are just as necessary for the continuance and growth of life as are the tangible ones. But the tangible, material requisites, such as food, clothing and shelter, may be considered first. Among these, secondary only to a proper supply of pure water, food will doubtless be considered as of first importance.

The actual current production of food (with some similar staples) upon our farms, stated as a rate per annum *per capita,* is given in Tables 20 and 21. The caution given in Chapter I, that *it is only quantities reduced to a per-capita basis which can guide without misleading,* is repeated here. What is needed to be known is: What may each person, on the average, expect as his own individual economic possibility, when drawn from that pool of a hundred million different interests which we call a nation.

TABLE 21

Stock on Farms and Ranches, 1880 to 1915, per Capita

Year	Cattle	Sheep	Swine	Horses	Mules and Asses	Chickens, Turkeys, Geese, etc.
1880	0.791	0.841	0.992	.....	.....	2.25
1890	0.815	0.571	0.912	.....	.....	4.54
1900	0.908	0.809	0.848	0.278	0.046	3.29
1910	0.692	0.575	0.646	0.250	0.050	3.22
1915	0.577	0.495	0.640	.....	.....	....

TABLE 22

Growth of Farms (per Capita), 1850 to 1910

Year	Number of Farms	Acres of Farmland		Valuation of			
		Improved	Unimproved	Farms	Implements	Stock	Products
1850	0.0624	4.87	7.79	$171	$6.54	$23.47	
1860	650	5.19	7.76	254	7.82	34.63	
1870	690	4.90	5.67	232	8.74	39.54	$50.80
1880	806	5.68	5.01	243	8.10	29.90	44.12
1890	725	5.68	4.22	257	7.82	35.10	39.08
1900	752	5.43	5.59	268	9.98	40.30	49.34
1910	691	5.20	4.35	445	13.75	53.50	59.67

The historical record as to the fruit of this natural expectation is given in Table 20. The stock which has been currently maintained upon our farms and ranches, per capita, is stated in Table 21. The growth in area and pecuniary value of the farms themselves is set forth in Table 22. The production of dressed meat from our slaughter-houses, together with some other foodstuffs from the farms, has ranged as shown in Table 23.

TABLE 23

MEAT-SUPPLY PER CAPITA PER ANNUM, 1880 TO 1910

Year	Beef lbs.	Mutton lbs.	Pork lbs.	Veal lbs.	Total Meat lbs.
1880	....	....	52.03	....	73.66
1890	49.50	4.12	57.65	....	111.27
1900	42.23	5.14	68.15	1.04	116.56
1905	48.60	5.46	60.30	1.93	116.29
1910	47.90	5.46	56.68	2.86	112.90

Year	Chickens, and Turkeys lbs.	Eggs doz.	Condensed Milk lbs.	Peanuts bus.	Orchard Fruits bus.
1880	2.03	9.11			
1890	4.10	13.0	....	0.057	2.98
1900	3.07	17.0	2.45	0.157	2.78
1905	......	......	....	....	....
1910	5.31	17.3	5.38	0.211	2.35

If the data given in these tables represented the *average rate of production for the entire decade* preceding the report, in each case, they would present a perfect picture of the country's progress in the art of feeding itself. Unfortunately they represent only the single year preceding the year stated, and so are subject to irregularities which would disappear in the averaging of an entire decade. Thus the year 1915, for instance, was one of extreme dullness, owing to the recent outbreak of the Great War.

Nevertheless, since one commodity is apt to rise as some other falls, taken broadly they give a reliable record. Moreover, the tables are too sweepingly unanimous in their general showing to be open to criticism from any such a minor point of view.

Our Material Supplies Increasing.—The tables show conclusively one thing, namely, *that there has been no perceptible diminution in food-supply per capita during the sixty-odd years displayed.* So far as raw cotton and wool are concerned, clothing may also be included in this statement. Indeed, in many staples—notably wheat, oats, rice, butter and cheese, sugar, poultry and eggs—there has even been accomplished a marked increase in the supplies per capita. Most remarkable of all, this increase has been most marked during the last two or three decades! Yet this is just the period during which prices have risen most phenomenally!

Prices and the Alleged Law of Supply and Demand.—In the face of this one modest group of tables of blanket-statistics, coupled with common knowledge as to the way in which prices have been rising during the last two decades, we need not await refined statistics as to prices before sweeping completely off the stage any relationship between prices in general and the common superstition as to a law of supply and demand. *There is not to be found, in any source of exact information yet available to the author, one atom of foundation for this well nigh universal superstition.*

While the *relative* price of a single commodity, in proportion to the average, will frequently be found obeying this law, prices as a whole pay no appreciable attention to it. Our task will be best advanced if the reader now sweeps that superstition into limbo forever, and forgets it.

Prosperity and Discontent.—Therefore, speaking from the broadest possible basis, it may be laid down as a fundamental rule that no hypothesis concerning any increase in the cost of living, nor in difficulty in obtaining employment, nor any decrease in the birth-rate, nor any other social problem whatever, *may be explained as having been due to decreasing supplies of life-support;* for there have been none. Whatever may be the social problem presenting itself for debate, it must be considered always in view of the fact that, however prices and other economic difficulties may have been growing upon us more or less steadily—with acceleration rather than constancy of rate—there is absolutely no foundation for any hypothesis of dearth or famine, due either to the increase in population, or to that growth of the factory-system which others allege as the cause of the trouble, or to that failure to complete such growth which is alleged in these pages as the cause. Whatever may have happened, or may have failed to happen, *we are unquestionably richer to-day, per individual, on the average, in all the basic material requisites for life, than at any previous period.*

Disparity and Discontent.—This being so, at least three immediate conclusions from this fact must be chalked down as settled, before any step forward into more complicated questions may safely be taken. The first of these is that all of our modern troubles are due to *relative,* rather than to *absolute,* poverty. While absolute poverty exists, it is not amongst sufficiently large numbers to threaten. It is merely the less-rich who, in enormous numbers, envy the more-rich.

The Nullified Law of Supply and Demand.—The second conclusion is based upon the obvious fact of a simultaneous rise of supplies and prices, visible now over two or three decades. This proves that to-day *the law of supply and demand is virtually inoperative. There are plainly at work within the economic organism some forces, however unidentified as yet, which are so gigantic, in relation to any modest and natural balance between supply and demand, that this last phenomenon is turned completely topsy-turvy thereby.* The law of supply and demand now has about the same control over prices that gravitation has upon dust in a whirlwind.

Futile Reforms.—The third conclusion is the futility of looking to any increase in our supplies per capita—except as an incident to a basic reform in our system of distribution—as a remedy for any economic trouble. Whether it be vacant-lot gardens, or efficiency-engineering, or feeding the Bolsheviki to keep them quiet, *any social program which relies upon a mere increase in the rate of production, under the present system of distribution, as an artificial prop to social stability and contentment, is doomed to failure.*

For we have already long had that remedy at work, for decades in the past; yet these ills have grown up upon us in the face of it. Obviously, until we alter the system itself, *in some factor more basic and powerful than production itself,* prices must continue to rise, employment to shrink in a periodic, spasmodic way, and discontent to become continually more violent, in spite of increasing supplies per capita. This prediction can be put forth most confidently for no more mysterious reason than that all these things have been occurring increasingly in the past, while supplies were steadily increasing, per capita, at the same time.

The Exception Proves the Rule.—However, to the continuity of this past increase in material riches per capita there have been some exceptions. The Civil War created a temporary deficit in the supply of every commodity except potatoes and hay. In the case of sugar and rice, both southern products, this deficit continued for several decades after the war. But usually within a single decade after 1870, and by 1910 in every case except "pease and beans," this deficit had been more than overcome, and the food-supply per capita made more plentiful than it had been in 1840 or 1850.

Yet, it is to be noted, *the period covered by this temporary deficit, from 1865 to 1880 or thereabouts, was not at all one of hard times, nor poverty, nor discontent, nor particularly one of high prices.* Very plainly, none of these things find their basis in paucity of supply. From 1864 to 1873 was one of the most prosperous periods, commercially speaking, which this country ever enjoyed. Prices were somewhat high, but *they were falling.* To-day they are rising.

Even after the panic of 1873 the recovery was by no means so slow that it could be connected in any way with the slow process of increasing our national food-supplies. From 1880 to 1895 was a period of almost unexampled general prosperity.

All these facts are of the utmost significance, as showing that *our fluctuating prosperity, activity of employment and welfare for the common people have no visible relation whatever with the magnitude of our crops!* The law of supply and demand is not at work to any visible degree.

Yet, just so long as we continue to be afflicted with commercially subsidized editorials and university-bred political economy, so long shall we rush to get the latest news as to crops in order to estimate coming prosperity. If the crops be but "bumper" ones we shall continue to forget the prices of food out of sight overhead, and the volcanic discontent rumbling invisibly beneath our feet, and to hug ourselves with a fool's satisfaction.

The Symptoms World-wide.—The same lesson is taught by the latter portion of these tables. The period from 1907 to 1914 was one, first, of acute panic, and then of steady hard times and growing unemployment. Prices rose rapidly. The German Reichstag itself became excited over the prices of food in October, 1911, while the New York *Times* for Feb. 22, 1912, quoting the

Association for Improving the Condition of the Poor, stated that food-prices had risen 25 per cent within a year.

Such news-items are but samples of a myriad showing the popular discontent with the rising cost of living, which found expression in food-riots in every country in the world—in London, Vienna, Rome, Bombay and Yokohama, as well as in New York, Chicago and San Francisco. A single page of the author's scrap-book of clippings from the *Times* reveals two cases of fatal starvation upon the streets of New York in the month of January, 1912, with a report of butter's being higher in price than for twenty-eight years past.

Yet these past three decades were not at all ones of a falling supply of food, per capita, *but of markedly the opposite.* According to the tables, there had been a slight decrease in the supply of corn and wheat, it is true, but only a slight one. Potatoes had remained about the same in quantity. But the supply of oats had risen substantially, by some fraction varying from a quarter to a third. Butter, the commodity quoted above as being higher in price than for twenty-eight years past, had increased in supply by probably fifty per cent! Other supplies had increased even more astonishingly. *Rice had increased fourfold and sugar tenfold* in quantity, during that period; while hay had more than held its own, wool had increased by half, and cotton, poultry and eggs had virtually doubled in quantity available per capita!

Yet the result of all this horn of plenty, in its effect upon prices, was nevertheless a phenomenal advance, which, arrested temporarily from 1913 to 1915, has now burst forth upon the world with increased virulence, in the price-advance of 1915-17. The law of supply and demand has been exactly reversed in its action, by some more powerful force yet to be identified statistically!

Yet even now that we have a national food-dictator, who might be expected to possess all the facts, they are still trying to make us believe that the high and rising prices, and the irregular supplies, are due to sheer dearth of food-stuffs, or of people unwilling to work at agriculture! The facts do not support the allegation. It is not that stocks may not be subject to hoarding for speculative purposes. *It is the complete lack of connection between supplies and prices, shown throughout our entire* *economic history, but especially of late, which is significant.* This is what needs to be investigated.

Traffic Charged All it Will Bear.—At the moment of completion of this book prices are rising so rapidly that no estimates can be made. There is not time to collect data before they become obsolete. Yet very plainly, these prices are high without adequate explanation by dearth. There is plenty of material on hand, *but it may not enter the market.*

It is not that the dealers personally decline to trade, or that any sort of exhortation, imprisonment or execution, applied to any vague "middleman," would overcome this reluctance. The reason is the very simple and natural one that, under the present complete lack of system for transferring food from producer to Consumer, *no dealer can afford to handle it except at a charge amounting (in aggregate) often to several times the cost of production.*

The stocks now held off the market are those lots, which, let us say, offer a margin of only 250 per cent for costs of doing business and profits, when 300 per cent is the minimum margin which will keep this most inefficient system going. The food-dealers are no more greedy than is the reader. No one can afford to conduct business at a loss, nor at less than a minimum net income. Everyone, on the other hand, is to blame who does not denounce a system—the commercial system—which can be operated only upon margins of gross profits something like these outrageous figures.

That this is the real situation is plain. According to the more reliable daily press, now that milk is selling at fourteen to sixteen cents, whereas a decade ago its price was six cents, *the farmers are feeding large quantities of surplus milk to the pigs!* It does not pay to market it. Now that potatoes are selling $1.40 or more a bushel, they are being left to rot in the fields, or are being used as fodder, by the hundred million bushels. Yet this year's crop of potatoes has been estimated by the Government as 154,000,000 bushels greater than last year's crop! What's the use!

The lesson to be drawn from all this by the "man in the street" is to cease appealing for some increase or other in our supplies of food, either as a remedy for the high cost of living or as a war-measure, to stop blaming someone else for not going back to the farm to raise more stuff (to be left rotting where it grew), and to stop shouting for some vague middleman or other to be taken out and shot for his avarice. If there is anyone to be shot it is the reader, that he did not long ago recognise that *spending money efficiently is just as important as earning it,* that he did not get together with his neighbors and then dare to say that his dollar is his own.

National Vanity.—Should the author's vision in this matter incur suspicion of astigmatism, due to his too long concentration upon these evils, let us quote the words of the Hon. Frank S. Black before The Traffic Club of Pittsburgh, spoken March 30th, 1911, long before the Great War had upset all our perspectives:

> "There are many phases of our progress which emphasize our danger. We can manage these if we keep our heads and take our time. But a wise man in a hurry will blunder as often as a stupid man picking his way. We solve too many things off-hand. Their magnitude seems never to dismay us, and because we have always landed on our feet we seem always to expect to do so. This mental attitude may come from confidence, and it may come from vanity."
>
> "A large part of our fortune is due not to our skill, but to the growth and vigor of the country. The investment of a day's labor or a dollar in money produces here a bigger yield than it has at any other time or place on earth. This is not so much wisdom as luck. Much of what we have is not wages, but bounty. If we lived in Switzerland or China we might be farming in a crevice or wearing wooden shoes. And before we get too puffed up we would better see how much we have done, and how much has been done for us."

The fact is more than significant—it is menacing—that in spite of the tremendous expansion in territory and transportation which this country has experienced during the last sixty or seventy years, including the development of the New South and the acquisition of Hawaii, Porto Rico and the Philippines, together with the vast region here at home reclaimed from the desert by irrigation and "dry farming," yet the number, size and material productivity of our farms, or their potentiality for supporting human life, have all remained substantially unchanged during that long period (if they have not gone backwards), in proportion to the population relying upon them for subsistence, and available for working them.

Automatic Involuntariness Again.—This is not so because we have not yet invented implements and other aids which qualify us—even with a decreasing fraction of the population devoting itself to agriculture—to increase our produce until every person is surfeited with food. It is so because our relative proportions of population in town and country respectively, and the proportion of total productive power which is allowed to get through to the Consumer, *is controlled rigidly by commercial forces so huge and implacable that any individual readiness to produce, whether for patriotic purposes, or for love of the work, or in need of the money, is impotent to assert itself with any effect.*

Yet this control is *not* that of any individual, nor any group, nor class, nor "trust," nor "interest," whether swayed by selfishness or by any other motive. Therefore it is not to be appealed to, either by exhortation or by threat, to relax its merciless curb-bit authority. Even those whose daily activities, as members of the myriad composing the commercial system, embody the expression of this control *are powerless to guide or arrest it.* Businessmen are as helpless as wage-earners to mitigate the severity of economic conditions. This restriction of production below normal is the result of interactions between millions of human beings many of whom are poor, and all of whom are impelled by psychic forces exactly the same as yours or mine.

Thus, whatever may be the population of a land, whether growing or shrinking, whether ignorant or educated, *if it be organized industrially upon the commercial plan its production per capita will always be less than the hundred-per-cent normal fitting its particular grade of ability to produce.* The population may be increased mightily by immigration, or decimated by war or pestilence; this has no effect upon this proportion. Political liberty or education, either in civil government or in technique of agriculture and manufacture, only magnify this proportion of deficit in production below normal productivity; for in all those countries which have had most of these things they have been devoted chiefly to the intensifying of commercial combat, and hence to the increase of this proportional deficit, rather than to increasing production by decreasing commercial combat.

This is why vacant-lot gardening, for instance, has not increased our output of garden-truck, per capita; nor has it decreased it. This is why efficiency-engineering, or the cultivation of technique with faddish zeal in any line, has done neither good nor harm, in terms of social discontent. So long as our activity in commercialism remains unchanged the most praiseworthy efforts at expanding production, or our most foolish errors in disregarding it, can work neither good nor harm on this *proportion* of actual to normal maximum productivity. Our successes will merely squeeze out into, and our errors bring back from, this big margin between the actual and the normal, enough to keep the proportion constant.

Increase in Technical Wealth.—Before leaving this question of material life-support it must be noted that other forms of material aids to life than the raw materials for food and clothing have also become increasingly available, per person. While supplies leading to food and clothing have been merely holding their own, or increasing moderately, those for the mechanic arts have advanced by leaps and bounds. The facts are shown in Table 24.

If attention be turned to Table 14, showing the distribution of the nation's efforts among the broader classes of vocation, the explanation of this remarkable exhibit of Table 24 appears. Reducing the percentages of Table 14 to those of population, it develops that during the last ninety years the agricultural vocations have fallen from 21.4 to 13.7 per cent of the industrial population. During that same time the two classes—"Manufacturing and Mechanical," which deals directly with the raw materials of Table 24, and "Professional," which deals largely with the training of such men—have increased from an aggregate of not over 3.6 per cent in 1820 to nearly four times that figure in 1910.

But the striking fact is that *the tremendous decrease in the relative population devoted to agriculture has not led to any decrease at all in the supply of food-stuffs, but rather to the opposite.* The explanation is that the many aids to agriculture, and to the transportation of its products, which have been derived from the growing technical classes, have been sufficient not only to counterbalance the diminution in agricultural effort by an even larger ratio, but also to *leave the bulk of the stuff shown in Table 24 as a net gain!*

Automatic Involuntariness Again.—Apparently it should be easy, from this enormous margin of material profit which the nation has been able to take in the form of technical devices, for it to do what it chooses in the way of expanding its food-supply,

TABLE 24

INCREASE IN MECHANICAL RAW MATERIALS PER CAPITA PER ANNUM, 1820 TO 1915

Year	Coal tons	Pig-iron lbs.	Steel lbs.	Copper lbs.	Lead lbs.	Gold Dollars	Silver Dollars	Salt bbls.	Petroleum gals.	Lumber feet	Aluminum lbs.	Cement bbls.
1820	0.0003	5	....	....	0.31	0.0076						
1830	0.022	29	....	....	1.24	0.044	0.020					
1840	0.108	38	....	0.013	2.00	0.688	0.020					
1850	0.270	54	....	0.627	1.90	2.157	0.002	....	....	(344)		
1860	0.415	58	....	5.13	1.00	1.464	0.005	....	0 67	(321)		
1870	0.765	97	4.05	6.98	0.92	1.2 7	0.425	....	5.72	(363)		
1880	1.274	171	55.9	12.06	3.90	0.718	0.692	0.119	22.0	360	....	0.042
1890	2.24	328	153.1	41.3	4.56	0.521	0.908	0.139	30.6	373	0.001	0.127
1900	3.15	405	300.8	79.4	7.10	1.037	0.468	0.273	35.0	460	0.094	0.226
1910	4.87	665	640	117.5	8.10	1.045	0.335	0.330	95.8	484	0.519	0.846
1912	5.14	697	737	130.8	8.22	0.977	0.352	0.349	98.0	....	0.686	0.899
1914	5.13	529	533	116.5	10.35	0.953	0.404	0.347	112.6	....	0.798	0.880
1915	4.54	592	431	....	10.22	0.978	....	....	....	....	....	....

in order to keep down the cost of living. Academically this is so. If we could forget the traditions which explain everything in terms of individual psychology, and turn our attention to *national organization* instead, all riches might be ours.

But in reality the country is now so shackled, by its superstitious devotion to the peculiar economic system which it has adopted, or inherited, that it is not only impossible for it to devote a larger portion of its energies to the extraction of larger volumes of food-stuffs if it wished, but, even if it overcame this obstacle and forced the population back to the farms, whither the money will not go, *those larger volumes of supply would not bring down the price of food! They could not even reach the retail market!*

Manufactured Wealth.—It is of course well known that the technical arts have also accomplished a huge development of finished products made from the raw materials of Table 24, in addition to the raw materials themselves, and that these all aid life materially. But these manufactured articles cannot be measured in physical units, as can the materials, but only in terms of money-valuation. A coat or dress, for instance, may mean all manner of quantities of value produced in manufacture, whereas a pound of cotton or silk is a fairly standardized thing. Hence, since it is our policy here to rely only upon indicators of economic progress which are independent of the varying value of gold, on the one hand, and the still more widely fluctuating scales of wages and prices on the other, conclusions will be based primarily and most surely upon the statistics as to raw materials. Most surely of all, they must be based upon the relative distribution of different sorts of human energy.

In pursuance of this policy the argument will return to Table 14 and carry its broad distinctions further into detail. In doing this it will be more convenient, when not expressing results as percentages, to reduce them to terms of a million inhabitants, rather than to a per-capita basis.

Women in Gainful Employment.—One of the fundamental features of the economic condition of any land is the proportion of its women engaged in gainful occupations outside the home. Thus Table 25 shows the steady and inevitable gravitation, or expulsion, of woman from the home into the factory. The first column, when viewed as a result of the last column, shows how woman is being forced out of domesticity by economic pressure, and how the race is suffering thereby. That is to say, the proportion of women to men is diminishing.

TABLE 25

WOMEN IN INDUSTRY (PER CENT), 1870 TO 1910

Year	Women in Total Population	"Occupied" Women to Total "Occupied" Population	Proportions of Entire Sex "Occupied"	
			Men	Women
1870	49.5	14.7	74.8	13.1
1880	49.0	15.2	78.8	14.7
1890	48.7	17.2	77.8	17.0
1900	48.6	18.3	79.4	18.8
1910	48.3	21.2	81.2	23.4

Although the next to the last column shows that men are also under this pressure, yet the middle column eliminates all modifiers and shows exactly the degree to which our industrial population is becoming female. In all the columns the figures for 1900 and 1910 show the recent marked acceleration of all these processes, due to the rapidly increasing stress of commercial combat.

The Tariff, Commercialism and Progress.—Those of us who have listened for decades, and with steadily growing impatience, to arguments based upon the idea that the tariff was the foremost force controlling American destinies, appealing to prejudice against European conditions for American labor, will find interesting this record in Table 25. For it shows how the pressure due to that same commercialism which has sedulously fostered the tariff is steadily transforming the earlier America of free husbandry, with womankind busy in her own home, into a parallelism with those lands where the women regularly perform the field-labor and help tow the canal-boats.

The Nation's Occupations Analyzed.—Those who seek minute accuracy in the classifications of occupations in the United States census will not be satisfied, at least with the data for the earlier decades. Thus the census-report for 1900 says:

> "This brief review of the development of the 'occupation' enquiry makes it evident that there has been no fixed classification or arrangement of occupations in the reports of the successive Federal censuses. Under the system of a temporary census-organization prevailing up to the present time, the officials of each succeeding census had no means of knowing, *in detail,* the methods and plans of their predecessors." (Italics mine.)

But this holds true only for the finer points. In attempting, as we are here, to compress into a single volume an outline of all past American economic evolution, the first duty is to get the biggest forces right. For us who are inquiring only for the real nature and approximate size of those gigantic changes in our economic system, the rough outlines of which have long been so apparent as to need no statistical proof, such minor discrepancies need not be recognized as real obstacles. For our purposes large numbers of occupations must be swept into a single class, and in this process the discrepancies of each tend to annul one another.

We are now engaged upon an enterprise—the quantitative analysis of our national dissipation of economic energy—which may not be neglected longer, if the nation is to remain stable and under control. If the census, our sole statistical guide which is competent in range of time and matter, is to be discarded because of microscopic inaccuracies, then we are lost indeed. The country may then never hope for an effective science of sociology, fit to serve as a foundation for statecraft. For it certainly lacks one now, and no school of sociologists gives sign of daring to create one—chiefly because of fear of making an error in the fifth decimal place.

But the census-data, when viewed in this broader aspect, show few signs of imperfection. Indeed, if the major conditions of enumeration are kept in mind, they become remarkably consistent. And finally, the censuses of 1900 and 1910, which are of the greatest importance of all, in that they reveal a marked acceleration of those tendencies which are broadly, if more vaguely, foreshadowed throughout the entire preceding half-century, are markedly in accord with each other in the care and accuracy with which separate occupations have been defined and classified.

It is too bad that even so late as 1910 no recognition whatever of the basic importance of distinguishing commercially combative effort broadly from productive occupations is manifested. But this, of course, is too much to ask. The census as it stands is a splendid achievement, worth far more than it has cost, and has now become invaluable as our sole guide, based upon the past, through the most threatening period of our history. In a day when all science, and particularly all economic science, is guilty of over-devotion to microscopic detail, to the neglect of fundamental principles, it is a pleasure to recommend a study of the census over the heads of those who cavil at it.

Variations in Standard.—The first difficulty, for present purposes, arises in the fact that the censuses before 1870 did not enumerate as to occupations the same portion of the population as later censuses; and it is important to go back to 1850. Thus the census for 1850 enumerated only the occupations of free males of sixteen or over. The census of 1860 apparently included also the free females of sixteen or over, although it does not so state positively. But the enumerations for 1870 and thereafter positively included both sexes of ten years of age or over.

Thus the decade of 1860-70, which also included the Civil War, shows some marked contrasts with the other decades. This is due to the entrance into the records at this point of both the former slave population, which was almost purely agricultural or domestic, and also all persons between ten and sixteen years of age, most of whom were either in the shops or mills, or were "help" on neighboring farms or households, when gainfully employed at all. This and the very rapid extension of our railroad-system westward during the two decades from 1860 to 1880, with its enticement of labor to new farmlands, explains how, in the face of a generally recorded relative decline of agriculture, the proportion of "farmers and farm-laborers" apparently reached its maximum as late as 1880.

For these reasons there has been added to the enumerated populations for 1850 and 1860, in the following analysis, estimated numbers of slaves of an industrial age (assumed to include all between the ages of fifteen and seventy). It is assumed that in 1850 these slaves, then about 1,400,000 in number, were three-quarters of them devoted to agriculture and one-quarter to domestic labor. For 1860, when the corresponding number was 1,730,000, these proportions were assumed to have altered to four-fifths and one-fifth respectively.

This addition of estimated slave-labor makes no difference in the nature of our conclusions, but probably makes them more accurate quantitatively. It reduces the slight discontinuity still visible in the records between the earlier and the later decades.

Basic Statistics.—From this basis have been produced two analytical tables of contrasted sorts of occupation, Tables 27 and 28. In these tables all the occupations appearing in the census-reports have been segregated into two broad classes, and each broad class into sub-classes, as follows:

TABLE 26

Classification of Occupations

Class I. Production (Table 27)	Class II. Commercial Combat (Table 28)
(a) *Agricultural and Food-supply.* (b) *Textile and Clothing.* (c) *Mechanical, including Mining.* (d) *Transportation and Communication.* (e) *Professional.* (f) *Technical.* (g) *Domestic.* (h) *Miscellaneous.*	(j) *Occupations Directly and Solely Concerned with Ownership, Prices, Property, etc.* (k) *Mercantile;* Commercial, but also concerned in some degree with care of Stock of Goods. (l) *Makers of Munitions and Panoply of Commercial Militarism;* Apparently productive, but in reality not so. (m) *Divertive, Absorbent and otherwise Dissipative;* Makers or purveyors of the sorts of thing peculiarly adapted to the taste of the commercial fighter, the recipient of unearned income, or others under abnormally light or heavy economic pressure; also makers of other things peculiarly associated with commercial militarism, though not inseparably identified with it.

Along these lines of classification all numbers of persons variously occupied have been reduced to proportions per million inhabitants of total population, and recorded in Tables 27 and 28. Figures appearing in parenthesis indicate estimates based upon preceding rates of growth.

The Nation's Economic Skeleton.—Tables 27 and 28 contain in skeleton the entire story of our economic past. Their meaning is not immediately obvious, because of the mass of detail, which is of interest only to technical readers. But this meaning will be crystallized out gradually in the course of the following argument, leading up to Tables 43 to 47, all of them based on Tables 27 and 28, whereby the matter will be boiled down to an outline placing the lesson of it all before the reader in a more condensed form.

This lesson, however, may be discerned from even a cursory glance over Tables 27 and 28, so far as its major features are concerned. For the one fact which stands out there most prominently is the one which is of the greatest significance and importance in the interpretation of present-day history, namely, that *nothing connected with modern civilization, whether economic, ethical or political, has ever grown in the past, or is now accelerating in growth, at anything like the rate evinced by commercialism.* Neither science, religion, philosophy, technology, industry nor charity is playing anything like the part in modern progress that commercialism does.

Table 29.—The first step in sugaring off this dilute mass of statistics in Tables 27 and 28 is to reduce it to a number of totals significant of what is to be brought out. This is done in Table 29. But because the analysis, from this point forward. necessarily takes on a flavor of personal interpretation, Tables 27 and 28 have been given in full, to mean to each technical reader what they may.

Quantity x.—It has been noted that all during these decades there was busy at productive tasks, chiefly domestic and agriculture, a number of workers who escaped enumeration because they were not technically "gainfully" occupied. That is to say, they were not earning wages. Instead, they worked about the house, or on the farm, for board, lodging and clothing. No conclusion as to relative energies going to production and commercialism respectively can be reliable without some estimate of this population.

The only basis for such an estimate lies in the indubitable facts (1) that *the proportion of total population actively occu-*

TABLE

TOTAL AND PRODUCTIVE

	1850
TOTAL POPULATION of the United States	23,191,876
TOTAL ENUMERATION: All Occupations (slaves estimated)	6,771,876
Per Cent of Total Population	29.2
"EMPLOYED" PER MILLION INHABITANTS:	
TOTAL ENUMERATION: All Occupations (slaves estimated)	291,993
CLASS I: PRODUCTIVE POPULATION:	
(a) *Agriculture and Food-supply*: Farmers and farm-laborers, diarymen, gardeners, stock-herders, lumbermen, fishermen and oystermen and makers of agricultural implements and fertilizers	148,300
Butchers and slaughter and packing-house men	775
Flour and grist-mill men	1,200
Food-preparation factories	....
Cottonseed oil and cake	....
Total (*a*)	150,275
(*b*) *Textile and Clothing*: Bleachery and dye-works, carpet-factory, cotton-goods, hosiery and knit goods, silk-mill, and woolen and worsted goods hands	6,215
Button, corset and women's clothing factories	(147)
Dressmakers, seamstresses, tailors and tailoresses; milliners and millinery factories; lace and embroidery makers; artificial flowers and feathers; paper patterns	2,255
Men's furnishings	(10)
Sewing-machine makers and repairers	(30)
Shoe and leather makers	(6,000)
Upholstery makers	(60)
Total (*b*)	14,717
(*c*) *Mechanical*: Blacksmiths, boilermakers, foundrymen; brass, copper, lead, iron, steel, and zinc workers; machinists, mechanics; model and pattern makers; plumbers and steam-fitters; engineers and firemen; carpenters and cabinetmakers; saw and planing-mill men; masons and plasterers; painters, glaziers and glassmakers	21,560
Miners and quarrymen, stone and marble cutters	4,030
Makers of cement, lime, paint and explosives	166
Makers of electrical machinery	....
Total (*c*)	25,726

(Table 27 continued on pages 394 and 395)

27

OCCUPATIONS, 1850 TO 1910

1860	1870	1880	1890	1900	1910
31,443,321	38,558,371	50,155,783	62,947,714	75,994,575	91,972,266
9,965,557	12,505,923	17,392,099	22,735,661	29,073,233	38,167,336
31.7	32.5	34.7	36.1	38.3	41.5
316,937	324,337	346,762	361,183	382,570	414,987
147,900	154,300	154,600	146,300	137,000	137,600
(1,055)	(1,450)	2,065	2,387	2,498	(2,476)
882	1,515	1,165	753	486	429
....	(10)	27	55	107	163
6	17	66	94	144	185
149,843	157,292	157,923	149,589	140,235	140,853
5,902	7,009	7,505	7,692	8,210	9,132
220	363	711	797	1,316	2,041
8,090	6,640	8,515	11,298	11,182	10,745
(50)	(125)	223	330	397	418
73	189	235	(225)	(215)	210
5,797	5,227	4,464	4,040	3,300	3,430
102	158	208	407	405	220
20,234	19,711	21,861	24,789	25,025	26,196
21,584	27,342	27,361	34,378	34,702	41,727
7,400	4,970	5,630	7,122	8,100	10,360
175	311	229	355	416	639
....	....	25	140	538	949
29,159	32,623	33,245	41,895	43,756	53,675

(Table 27 continued on pages 394 and 395)

TABLE

	1850
Productive Population—*Continued*	
(*d*) *Transportation and Communication*: Automobile, bicycle and motorcycle makers, chauffeurs and garage-keepers	....
Carriage and wagon makers	604
Draymen, hackmen, teamsters and livery-stablemen	1,876
Post Office (gross income÷$1000)	237
Railroads (steam and electric), telegraph and telephone, boatmen and sailors	4,671
Total (*d*)	7,338
(*e*) *Professional*: Clergymen	1,158
Dentists and veterinarians	128
Physicians, surgeons and makers of surgical appliances	1,759
Total (*e*)	3,045
(*f*) *Technical*: Architects, designers and draftsmen	33
Engineers (civil, electrical, mining and mechanical)	92
Journalists	65
Librarians	....
Teachers, professors, literary and scientific persons	1,340
Total (*f*)	1,530
(*g*) *Domestic*: Housekeepers, stewards, servants and waiters	(31,000)
(*h*) *Miscellaneous Occupations*	39,266
Grand Total "Productive"	272,897

pied in all lines together has probably been about constant, or in any event has not increased, since the beginning—the increase in enumeration coming solely from a transfer of labor from home to factory; and

(2) that *this process of transfer must now be nearly finished*—so much so that it is safe to assume that by 1920 it will have been completed. Working from these assumptions, by exterpolating the third line of Table 21 to reach 1920, it appears that this constant proportion of total population which has been busily occupied probably amounts to at least *435,000 per million.*

Next it is safe to assume that the portion of this 435,000

27—*Continued*

1860	1870	1880	1890	1900	1910
....	....	....	29	260	1,617
1,180	1,435	1,054	1,057	967	761
2,640	3,351	3,824	6,285	7,501	9,099
271	513	665	967	1,340	2,437
4,465	6,448	7,167	10,168	11,238	21,980
8,556	11,747	12,710	18,506	21,306	35,894
1,194	1,137	1,290	1,402	1,526	1,283
190	233	287	381	495	562
1,754	1,620	1,719	1,677	1,753	1,768
3,138	2,990	3,296	3,460	3,774	3,608
54	86	123	277	387	686
(140)	191	165	687	1,231	2,228
108	137	245	347	394	374
2	5	(12)	(26)	55	116
3,620	3,336	5,160	5,700	6,095	7,160
3,924	3,755	5,705	7,037	8,162	10,564
30,690	25,950	23,040	24,580	21,370	22,360
46,549	37,735	48,632	34,409	50,318	30,324
292,093	291,803	306,412	304,265	313,946	323,474

which escaped enumeration in the past was always occupied at productive tasks, either in the field or in the house. Therefore this quantity, which is called x in Table 29, belongs with the purely productive classes of occupation. It is found by subtracting from 435,000, at each decade, the total enumeration per million of total population.

If we are not to assume that this quantity x fairly represents the migration from tasks within the home or upon the farm to those within the factory, then we would be forced to conclude that the steady increase in those enumerated as "occupied" proves that this nation must steadily have been becoming increas-

TABLE

CLASS II—COMMERCIALLY

Personnel per Million of

	1850
(*j*) *Directly Combative, or those concerned solely with Markets, Ownership, Price or Property:*	
Agents	334
Bankers and Stock-brokers	135
Commercial Travelers	(50)
Manufacturers and Officials	976
Officials of Banks and Companies	59
Total (*j*)	1,554
(*k*) *Mercantile:*	
Hucksters and Pedlars	460
Merchants: Wholesale and Retail	7,505
Porters and helpers in stores	137
Total (*k*)	8,102
(*l*) *Munitions and Panoply of Commercial War:*	
Blank-books and bookbinding	149
Bookkeepers, accountants, clerks, copyists, salesmen and saleswomen, and stenographers	4,370
Fancy and paper boxes, labels and tags, wooden packing-box makers	(56)
Lawyers	1,033
LIGHT: Petroleum-refining, gas, electricity, gas and electric fixtures	51
Messengers, office-boys, etc	(100)
Paper and wood-pulp, envelopes and paper-bags	(423)
Printers, printing-materials, lithographers, pressmen	642
Scales and balances, show-cases, signs and advertising novelties	17
Typewriters and supplies, cash registers and calculating machines, lead-pencils and fountain-pens	....
Total (*l*)	6,932

(Table 28 continued on pages 398 and 399)

28

COMBATIVE OCCUPATIONS

Total Population

1860	1870	1880	1890	1900	1910
810	527	677	2,775	3,160	4,112
307	276	386	572	960	774
(100)	188	561	932	1,217	1,778
724	1,480	1,387	2,128	3,185	6,170
96	260	310	634	971	1,561
2,037	2,731	3,321	7,041	9,493	14,395
631	890	1,066	939	1,004	874
8,520	9,270	9,560	10,985	10,920	10,910
324	817	742	(700)	710	1,471
9,475	10,977	11,368	12,624	12,634	13,255
152	200	211	219	209	217
5,935	8,060	10,700	16,110	21,080	31,580
116	257	354	517	660	839
1,108	1,056	1,280	1,425	1,500	1,328
297	349	567	737	1,021	1,550
(150)	226	279	816	938	1,275
708	966	1,053	1,022	1,366	1,745
756	1,084	1,454	1,967	2,040	2,480
24	35	43	43	(62)	136
....	4	8	62	116	240
9,397	12,700	17,023	24,351	31,157	44,118

(Table 28 continued on pages 398 and 399)

TABLE

	1850
(*m*) *Divertive, or Absorbent of Unearned Incomes:*	
Actors, showmen, etc	32
Artists, musicians, and teachers of art or music	243
Barbers and hairdressers	259
Bartenders, saloon and restaurant keepers	236
Boarding and lodginghouse keepers	110
Confectionery and cocoa products, soda and mineral water, and apparatus	100
Cigars and cigarettes	(130)
Jewelry, etc	(180)
Launderers and laundresses	(900)
Liquors: Distilled and malt	274
Patent medicines	36
Perfumery and cosmetics	8
Phonograph and photographic apparatus	....
Total (*m*)	2,508
Grand Total "Commercially Combative"	19,096

ingly industrious since 1850. But this is unbelievable. There is no evidence to uphold this idea, and there is much against it.

America in 1850.—The earlier decades of our history were times of indefatigable toil, on the part of almost all classes. In 1850 the law-offices of our best known congressmen often opened at five in the morning, to meet the farmers and market-people. The universities began their lectures at six or seven o'clock, while the laboring industries ran "from dawn to dark," winter and summer.

There were then few slums, it is true, and no great barracks of tenements or enormous factories, with their armies of workmen, as we now know them. But on the other hand both men and women, and even children, then toiled under another and equally hard, if a more fair and free, taskmaster—the natural obstacles of an unconquered continent. Agitation for an eight-hour day, now so widely accomplished, would then have been a joke.

There were then no women's clubs at all, and few even for men. Most of our older men's clubs were founded during the 'sixties.

28—*Continued*

1860	1870	1880	1890	1900	1910
56	84	148	441	456	768
473	491	790	1,344	1,534	1,884
354	621	894	1,350	1,718	2,123
473	1,316	1,657	2,326	2,705	2,505
382	332	390	705	934	1,798
97	226	260	466	497	679
254	674	1,062	1,382	1,357	1,516
190	264	258	222	275	336
1,229	1,580	2,430	3,950	5,060	7,215
376	456	651	557	567	663
34	63	80	112	152	120
17	19	15	22	23	26
....	....	3	25	62	112
3,935	6,126	8,638	12,902	15,340	19,745
24,844	32,534	40,350	56,918	68,624	91,513

An afternoon at bridge would then have ostracized any respectable housewife, as a wanton idler inviting moral dissolution. Virtually everyone dined at noon. Only the very well-to-do dressed for evening, to the extent of putting on "something fresh" for supper at six. Afternoon-tea was unheard of.

Diversion and recreation, as we now know them, were then all but non-existent. Holidays were rare. Neither Lincoln's Birthday nor Memorial Day had been thought of. Even the giving of Christmas gifts had then barely lifted its head as a popular institution. Dancing, cards and the theater were frowned upon by the church and discountenanced in the better homes.

Virtually none of the houses had verandas, for one would be so idle as to sit upon them by daylight, and "night air" was thought to be deadly. Pleasure-driving was an unusual indulgence, regarded as a natural folly of youth, and even walking for recreation on Sunday was generally accepted as ticketing the sinner straight for hell.

Sport was in its infancy. Yachting was just carving out its earliest history, the "America" cup having then not yet been contested the first time. The first Yale-Harvard boat-race had yet to be rowed. Golf, tennis, football, hockey, squash, racquets, bicycling, polo and other sports now current and at one time rampant, were then unknown. Even baseball and billiards were all but so.

There were few cities of appreciable size, and even they had meager resources for diversion. For recreation the back-districts relied upon corn-huskings, house-raisings and prize-fights—in the last of which Theodore Roosevelt describes the gouging out of eyes as common practice within the rules. P. T. Barnum was then only starting his wonderful career as an entertainer of toil-worn, monotony-crazed country-folk, striking the keynote of popular demand of the times with his "the public loves to be humbugged," as accurately as the musical farce, the cabaret and the jazz-band strike that of to-day. For each of these was a product not of the conscious ethical standards, but of the subconscious economic conditions, of the time.

In 1850 American literature, art, drama and music were still in their infancy, and formed no appreciable part of the life of the people. Jenny Lind had not yet sung in Castle Garden. Charles Dickens had then been known but a dozen years. Fully half his host of world-loved characters were yet unborn. "Harper's Magazine" and Godey's "Lady's Book," the principal magazines, were then prized in many a village-home whence have come men and women since famous in American history and literature; but they were accessible only to a minority. Public libraries virtually did not exist.

Ideas circulated throughout a limited world. Wisconsin and Iowa were our western Indian frontiers. Livingstone had not yet explored Africa, nor Commodore Perry awakened slumbering, isolated Japan.

In 1850 Ohio was further from New York than is California to-day. There were neither sleeping nor parlor cars, and very few railroads even of the crude, disjointed sort of that day, on which cars must be changed every fifty or one hundred miles—usually with a cheerful irresponsibility as to connections. From Columbus to Cleveland, Ohio, even as late as 1846, when the facts reported by our census for 1850 were in process of formation, one still had to travel by horse-drawn coach, jolting over unspeakable roads—often built "corduroy," of unhewn logs laid crosswise and contiguous, to form a solid surface over the mire—

the passenger sitting upright for thirty-six consecutive hours! Emerson in that decade found travel so exhausting as to all but prohibit his giving lectures. Travel for recreation was virtually an innovation with the Centennial Exposition of 1876.

"Thrills" were few and far between in 1850. Even the cultivated usually retired before nine, for lack of illumination adequate for reading. The modern standard evening of social enjoyment—at the clubs, hotels and theaters for the rich, or at the "movies" for the poor—must await the coming of the electric light. The six-hour office-day and the Saturday half-holiday were still a half-century deep in the unknown future. To-day's summer-hotels and winter-resorts crowded with adults seeking any possible distraction from the tedium of idleness, its array of summer-camps with paid entertainers for boys and girls, its traditional necessity for the rich of a trip abroad, or to the Pacific Coast, or to the Florida beaches once or twice each year, and of daily distraction of some kind for all except the very poor—were all unimaginable to the plodding, hard-working Americans of 1850.

Such is the gigantic contrast between the social life of seventy years ago and that to-day—the contrast in outward form enforced by that inner contrast depicted in our tables of statistics. To assume that such a society as this of 1850 was thirty per cent less industrious, by poll, than the America of 1910, as the total enumeration of "gainfully occupied" would apparently indicate, would reduce this entire analysis to the level of a jest.

The people of 1850 were fully as industrious as now, and probably much more so. The total number, 435,000 per million, which is assumed here to be that full measure of industriously active to total population which, at least, must have remained constantly at work from 1850 until 1920, will probably prove to be short of the truth.

Quantity y.—The only other mysterious quantity in Table 29, that called *y*, is an arbitrary multiplier which expresses the author's rough estimate of the way in which an increasing proportion of the mechanic arts has been diverted from productive lines, as the decades passed, into contributory costs. That is to say, *y* refers to industries which, so far as the classification of Table 27 can go, must appear as purely productive. Yet, because their output is being increasingly absorbed to maintain commercial warfare, their efforts must be classed as contributory to commercial dissipation of economic energy. This is the only feature of our statistical estimate which is treated in this off-hand manner, and it is of quite secondary importance.

Thus, the last sixty years have shown a rapidly increasing proportion of all such expensive buildings as office-skyscrapers, retail shops, etc., which are directly devoted to commercial purposes. Then there are others, no less costly, such as hotels, theaters, clubs, etc., which are distinctly contributory to commercial dissipation, although not directly engaged.

Then in each such building machinery plays a rapidly increasing part. The sub-basements of modern hotels and office-buildings comprise an equipment with power, for elevators, electric light, steam-heat, refrigeration, vacuum-cleaning, etc., which far exceeds, in power, intricacy and cost, that of the average factory or transatlantic liner of sixty years ago.

Again, in addition to the building-trades, the various sorts of mechanics listed under *c* are contributory to every one of the fields of commercial activity listed in Table 28. Boiler-makers, machinists, linemen, etc., are all having the fruits of their labor increasingly wasted by diversion into commercial warfare. The field of transportation and communication is most prominent in this respect; but there is no sort of wage-earning and nominally productive occupation, from sand-hogs to roofers, from plumbers to cabinet-makers, which is not to be included. It is this broad fact which is given conservative estimate in the increasing values assigned to the multiplier *y*.

With most of the classes of activity except these mechanics the name of the occupation itself gives clue as to the probable destination of the product. But in these general trades we have no clue in themselves as to what this multiplier should be. Yet to omit it altogether would be deliberate error.

Relative Growth of Technology and Commercialism.—The primary aim of Tables 27 and 28, as stated, is to bring out the basic economic contrast, that between productive and commercial populations respectively. But secondarily these tables, with Table 29 as a crystallization thereof, are designed to call attention to the rate of growth of *technical activities,* as contrasted with the skilled trades, and of the latter as compared with the simpler trades or unskilled labor.

With the fact that these first mentioned occupations have grown at the expense of unskilled labor, whether in the factory or on the farm, the public is already familiar. Indeed, it knows it too well. That is to say, those who descant most loudly upon our national evolution have been laying altogether too much stress upon this technical progress, as if it were the largest and most significant indicator of the age.

Hence the reason for Table 29. For it shows that, while there has indeed occurred this phenomenal growth in technical energies, far surpassing that of any previous period of human history, yet *that of commercialism has been far greater still*—indeed, more than three times as great!

Later, as the analysis develops, it will also appear that this tremendous expansion of commercialism is far more important, in its influence upon our institutions, our beliefs and our national stability, than is technical progress. Indeed, our recent economic progress cannot be understood except by grasp of the broad fact that it is our growth in technique which has fed our growth in commercialism. Learning has been enslaved to negotiation. Commercialism has grown into the dominant institution of modern times only because invention has recently provided it with a myriad of means for expansion unparalleled in past history.

Yet, of the two, commercialism is the factor embodying its own initiative in growth. Invention merely permits it to grow. Thus, according to the author's estimate (which any reader may parallel for himself as he pleases, from the material provided by Tables 27 and 28), the quantity o of Table 29 gives the best measure available of the country's growth in technical activities. The quantity p gives the parallel growth of commercial activities. Comparison of the two reveals *the overwhelming superiority of commercialism over technique, as the absorbent of our national energies and the indicator of the trend of the times.*

From this broad lesson to be learned from Tables 27 and 28 let us turn back to a consideration of some of their details. For, lacking explanation, the reader may quarrel with some detail of their sub-classifications. Yet the whole plan of this statistical analysis has been to provide the reader with full data, and then defy him to reach any conclusion radically different, in effect, from the author's.

TABLE

VARIOUS TOTALS: PERSONNEL

	1850
(*x*) Excess of 435,000 over persons enumerated as "Occupied"	143,007
(*y*) Percentage of *c* "Mechanical" assumed to be diverted from production into commercialism by employment upon the construction of commercial buildings, hotels frequented by commercialists, and other tasks accessory to commercial warfare	20
(*o*) "*Arts, Crafts and Sciences*" = *c* plus *d* (excepting "draymen"), plus *e* (excepting "clergymen"), plus *f*	34,605
Percentage of increase in *o* per decade	....
Percentage of increase in *o* from 1850 to 1910	....
(*p*) "*Total Commercialism*"; Estimated as comprising four-fifths of the "Directly Combative," plus two-thirds of "Munitions," plus two-thirds of "Divertive," plus one-half of "Mercantile," plus four-fifths of "Automobiles," plus one-half of the remainder of "Transportation," plus *y* times *c* "Mechanical"	18,307
Percentage of increase in *p* per decade	....
Percentage of increase in *p* from 1850 to 1910	....
(*q*) "*Total Production*" = 435,000 minus *p*	416,693
Percentage of decrease in *q* per decade	....
Percentage of decrease in *q* from 1850 to 1910	....

Productive Occupations.—The classification of occupations in Table 27 is virtually self-explanatory. One fact of interest rather than of importance appears under "Professional" occupations. This is that the proportion of clergymen in our population has remained virtually constant throughout the sixty years, varying by only one one-hundredth of one per cent! Likewise that of physicians, surgeons, etc., has varied even less —only four thousandths of one per cent! Apparently our de-

29

PER MILLION INHABITANTS

1860	1870	1880	1890	1900	1910
118,063	110,663	88,238	73,817	52,430	20,013
25	30	35	40	45	50
40,943	46,627	49,842	63,211	67,971	93,359
18.3	13.9	7.0	26.8	7.4	37.3
....	....	....	....	....	169.6
23,916	33,926	44,283	64,457	80,690	118,725
30.6	41.9	30.5	45.6	25.2	47.2
....	....	....	....	....	548.5
411,084	401,074	390,717	380,543	354,310	316,275
1.3	2.4	2.8	2.6	6.8	10.7
....	....	....	....	....	24.1

mands for the healing of spirit and body respectively have remained constant throughout all the other gigantic changes in society, visible and invisible. Indeed, it is the constancy of such features as this in the tables which warrant the confidence that where the tables do show variations of appreciable magnitude they record actual changes in the general trend of the community, as to vocation and aim.

Subconscious Social versus Conscious Individual Forces.—These facts are also commended to those who see frequent signs of a current decline of religion, or of revolution in the treatment of the sick, or any other change originating consciously with the individual. Whatever such may have occurred, *they have not been great enough to record even a tiny ripple upon the surface of our statistical sea.*

The great forces and changes of modern progress are economic, mechanical, organizational and subconscious, rather than ethical, individual, psychological or conscious. All of our conscious ethics are but the product, through transformations more intricate than those of the technical world, of our subconscious acts. The people of one age or another do not all agree simultaneously to wear "tin clothes," or to build skyscrapers, as the fashion of the age, just from whim; but because some inventive mechanic, quite without intending it, has created conditions such that *no other form of life than that is possible.*

Now that so much stress is being laid upon the subconscious in the individual life, why cannot we have the subconscious properly recognized in our social evolution?

Competitive or Commercial Occupations.—The classification of occupations in Table 28 needs more discussion. Even as to Subclass *j* there may be many who will be inclined to question the propriety of regarding all these occupations as useless or destructive; while further down the list the doubt might grow, from the viewpoint of the man-in-the-street. But a reference back to the picture of the imaginary factory permeated with ownership-in-industry, in Chapter VI, will show that all these activities are connected with ownership where no ownership needs to be exercised, and that therefore they are waste.

Nevertheless, it is true that a small portion of the activities of Subclass *j* are productive. The reason for apparently overlooking this fact lies in the countervailing fact that *small portions of all the activities classified as entirely productive, in Subclasses a to h of Table 27, are in reality commercially combative.*

Thus all of the time spent by working or professional people in seeking jobs, in unemployment, in strikes or lockouts, or in seeking to buy daily supplies at the best possible bargain, must all be classed as combative, duplicative, wasteful and destructive of energy. The amount of strength lost in the one item of daily retail shopping is inconceivable.

As to womankind's instinctive pleasure in shopping, there is no disposition here to deny its wholesomeness, up to a certain degree. This degree is the natural pleasure incidental to the selection of goods in the only natural field for shopping, namely, a huge bazaar or department-store *monopolizing the trade of its district and selling the same goods at the same price as every other store in the district.* In such a store time would be spent as at a world's fair, solely in the choice of commodities from an attractive stock *representing everything available anywhere in the land,* and in true education at the hands of the disinterested exhibitors—for salesmen in the modern sense they would be no longer.

In shopping of that sort the endlessly wearisome question: *Where* to buy? would have disappeared. Even the question: *What* to buy? so far as it now turns upon the wisdom of one bargain or another, would be gone. For every article offered for sale, under such a system, would be an equal bargain, everywhere in the land.

The sole factor in selection would then be personal taste. But this is the sole pleasurable feature in shopping in any event; and then for the first time it would enjoy free play. The rest of it is all hard work, even to-day; and then that part would be gone.

Should any woman-reader still feel disposed to defend this her ancient prerogative to shop wearily from store to store, trying to match goods or to better a price by a hair, let her not forget that her daily worries at home over securing the most economical domestic supplies and a competent servant, and the annoyance and delay involved in finding the right man to attend to any little repair-job about the house, are inseparable parts of this same prerogative, her feminine heritage of commercialism, to which she clings not wisely, but too well.

Again, superintendents have been classified in these tables as unqualifiedly productive. Yet one of their regular duties is the hiring of labor; and it is commonly accepted that the harassing of their nerves and the waste of their time in examining long strings of applicants for each little job, for which the bulk of the applicants prove to be incompetent, is one of their heaviest burdens.

Another instance, apparently, is the uniform difficulty of extracting from the labor available the quality of industry expected. Yet to whatever extent either of these difficulties may exist they are wholly due, we shall see in later chapters, to the presence of commercialism. Briefly, this always operates to develop a deficit of demand for labor below supply. Therefore labor, due to the mental and moral malnutrition due to its being a surplus, is always undereducated, in proportion to what is physiologically and naturally possible.

The energy dissipated in this way by all grades of superintendents, including housewives as such, should be classed as commercial in our statistical contrast. Yet it cannot appear in the enumeration except as an estimated counterbalance against similarly hidden items on the other side.

Or, for another one of many such instances, take the manufacture of furniture, which is classed in Table 27, as a wholly productive occupation; and so, in general, it should be. Yet a large and expensive portion of the furniture-business is now devoted to supplying office-furniture, and this is used almost entirely for the purposes of commercial warfare. Much of the remainder goes to furnish or decorate hotels, apartments, etc., which exist solely at the behest of the commercialists. Our statistical contrast would not be fair to itself if it did not take cognizance of facts such as these; yet they cannot appear statistically except in the form of paired allowances.

In the author's estimate of total commercialism p, in Table 29, this feature of the furniture-trade enters through the multiplier y; but in the contrast between Tables 27 and 28 it finds no expression. Therefore there is much to be balanced out before these primary tables, as they stand, may be accepted as accurately illustrative. Their lacks, however, have carefully been kept on the conservative side.

Crass Inefficiency Embodied in Modern Mercantile Methods.—But let us consider some of the items classed as purely commercial even in this primary classification. Take Subclass *k*, "mercantile," for instance. Apparently all mercantile pursuits are useful. The maintenance of stocks must be an inevitable part of any system. Indeed, when we have exchanged the present commercial system for a nationally organized factory-system much better stocks than now will be maintained.

But their maintenance will then have little in common with mercantile pursuits of to-day. For consider the planlessness and duplication of the present system (?) of a myriad of little, irresponsible, unconnected, haphazard stocks! Go shopping anywhere and observe the multiplication of little stocks in trade, each duplicating all the others in ninety-odd per cent of its goods, yet none of them offering any assurance that its stock completely represents the choice available from the sources of supply. Think how much would be saved in money, in space and in the Consumer's time if the entire investment in store-goods within any one district, whether in the smaller shops or in the huge department-stores, were to be centralized in a single bazaar, and that the agency for every factory in the land.

Walk along the miles upon miles of petty shops in every large city. Observe the pushcarts and the curbstone fakirs. The cost of all this duplication and multiplication, in the price of the goods alone, is appalling enough, in aggregate. Yet it is as nothing compared with the less tangible cost to the Consumer in his lost opportunity to enjoy complete arrays of goods in a single display, where anything produced can be found without loss of time and trouble, in standardized grades and at a uniform price throughout the land, if it is in existence at all.

Or ride on an elevated train through any warehouse-district, particularly in summer, and consider the warehouse from a superior, factory-system point of view. Get first a whiff of coffee, then one of hides, then one of soap and then one of lumber, and then observe the whole list repeated each block or so.

Observe the congestion of trucks in the street below, each loading some microscopic portion of these many duplicated stocks into the least efficient of all known means of transportation (except the Chinese plan of human porterage)—horse-drawn, iron-tired wheels over cobble-stones. Observe the labor of carting it a few blocks to some other warehouse, where the job of unloading, storing, disgorging and re-carting is all repeated within a few days, without the slightest gain in value of the goods for human consumption.

Why, the ants have a society superior to men in this respect. For they, knowing no better means of transportation than porterage by muscular force, know enough not to duplicate this effort needlessly. They know enough to have a single warehouse for the entire community.

Ten minutes of thoughtful observation of any city-street in the warehouse-district will justify to any reader the author's placing the "teamsters" among the commercial and wasteful occupations. Let any such a reader ask himself, as a common-sensible man of affairs, what part of all this confusion and congestion would remain if all the stocks in the land, as well as all the machinery for their production and transportation, were once placed under the control of a single, salaried, national commissioner or superintendent.

As to the prompt result there can be little doubt. Such a commissioner would certainly adopt immediately some such principles of administration as these following:

(1) *No duplication.*—Each community or district allotted a single warehouse for each line of goods, where now we have dozens, scores or hundreds of little inadequate ones. No doubt as to where anything wanted is to be found.

(2) *Directness of transit.*—Warehouses would then be located on the line of physical transit from producer to consumer. Now they are located near the centers of negotiation, instead, nowhere near either producer or consumer.

(3) *Minimum of Transfers.*—Goods would then be handled only twice or thrice—once from the producing factory or the ocean-steamship to the central warehouse, either national, state or district, and again from there to the local wholesale depot or bazaar. For staple commodities going to outlying points there might be one more transfer, from district-bazaar to branch-store. But in all of these simple and direct transfers the goods would move in a manner strongly contrasted with the present method in three features, namely:

(*A*) They would move in much larger lots than now;
(*B*) They would move at an almost unvarying rate;
(*C*) They would move in unreversed directions.

For the amounts of such staples as coal, soap, standard weaves of cloth, and all foods except the most perishable of seasonable fruits, which are currently consumed by any community *are practically unvarying*—except as they are now artificially fluctuated by varying prices manipulated solely for commercial purposes. In response to this steady demand, all staples would then move, under the factory-system, in a steady, continuous stream—in direct contrast with their present spasmodic leaps alternating with fits of paralysis, first through one middleman and then through another, now withheld for speculative purposes and then released in excessive volume. Even the seasonal novelties would then move as troops are moved by a general officer, instead of surging like an unorganized mob, as they do now.

The result of the adoption of these obvious principles of factory-efficiency would be these following startling, but welcome, changes in the aspect of our daily city-life:

(*a*) *Warehouses Eliminated from Cities.*—The warehouses would then naturally be located at railway-centers or at contact-points between rail and water, well outside the cities. Little labor is needed for warehousing anyway, and under the factory-system less would be required; with that, too, settled for life. Under the present commercial plan both warehouses and factories must locate within the cities, not only in order to be near the negotiative centers, but because their demands for labor fluctuate widely and continuously, and only a large city can absorb these fluctuations in demand and supply of labor. But under the factory-system there could be no objection to having our principal warehouses as remote from the cities as powder-mills now are. Or rather, while our warehouses might remain near where they are now, our residential districts would move far away.

(*b*) *Trucking Eliminated from Cities and virtually Abolished.*—There being no warehouses in town, and only one system of delivery of what retail goods must be transferred through city-streets in order to reach the Ultimate Consumer, trucks would virtually disappear from our cities.

Wholesale purchases would of course be unknown. They would then be replaced by mechanical, automatic, requisitions passing between one department of the national factory-system and another, without debate as to price.

(*c*) *City-streets and Water-fronts may be smoothly Paved and Beautified.*—There is no natural reason whatever why our water-fronts should be the ugliest features of our cities, as now. They are the first portions to greet the eye of the stranger. They should be dignified and beautiful, and under the factory-system they would be so.

(*d*) *Railway-terminal Problems much Simplified.*—Freight-terminals would no longer be in the cities at all, but at the remote warehouses. No commodities would enter any city—

even a great seaport like New York—except those needed for actual consumption by its inhabitants. Transatlantic freight would be landed on the shores of Newark Bay or Jamaica Bay, and would stay there, in huge warehouses, until wanted in Peoria or Oklahoma. Why stuff which is actually en route from Marseilles to Butte, Montana, should ever pass through the streets of Manhattan, as now, is quite beyond the comprehension of any sensible person of affairs.

(e) Our Cities would naturally become parked Exposition-grounds.—Large, beautiful buildings, of an architectural design emanating from the best talent of the country, and co-ordinated for the whole, would then be scattered over Manhattan Island, separated everywhere by grass and trees. Each would be a huge exposition of all to be had in America in its particular line, combined with the function of a bazaar for making retail purchases.

(f) Congestion would disappear.—The waste places in the country would be populated with those now crowded unnaturally into the cities. The natural population of the entire metropolitan district surrounding New York Bay, for instance, should not be over one million, for any national population not exceeding two hundred millions. And when the unneeded five millions departed for the country they would take the theatres, opera, concerts, universities, etc., along with them. Both country and city would become parks.

A Factory-system Metropolis.—New York must then be, as now, the main emporium of purchase, the chief center of interest in art, science, religion and administration—the mecca of people from Santa Fé and Vancouver who wish to shop and see and hear. But that is all it would be, of what it is now. The bulk of its present sordid occupations would have ceased to exist. The bulk of its present inhabitants would be scattered throughout a myriad of country-homes, where their work and pay would then draw them. No one would be in New York for purposes of "business," because there would then be no business; nor to seek occupation, because employment would everywhere be continuous. But in promising all that we are getting ahead of our argument.

Without stopping here to unleash the imagination unduly regarding the wonderful changes which must come over our civilization when once the organization of its industry is taken up as a unified national problem—for defter pens than this have already depicted these visions—only enough should be said here to justify the skeleton-classification of occupations which is presented in Tables 27 and 28. What has just been said as to the metamorphosis of merely this one item of industry and commerce—the maintenance of stocks—by the step from the present commercial to a national factory-system, must stand as a reminder that one must stop and imagine skillfully and energetically before denying the correctness of assigning to commercial classes many an occupation which at first blush does not seem to be such.

Sub-class m, "Divertive."—Thus, take for instance the general Sub-class *m*, the activities and commodities of which cover a large portion of familiar life which at first sight seems most remotely connected, if at all, with commercial combat. Take in particular the occupation of "launderers and laundresses." Here is an old-fashioned, laborious occupation which might be thought the last to be classed with commercial militarism, as unproductive. Surely cleanliness, as next to godliness, is a prime requisite for wholesome human life.

And so it is. And truly, also, laundry-work was originally connected solely with cleanliness—or so it was in America in 1850, at least. But what is its true aspect to-day?

It will be noticed that this occupation has expanded at a tremendous rate, multiplying its proportion per capita of population some six or seven fold in the sixty years. Does this unquestionable fact mean that we are now six or seven times as clean as we were in 1850? Or does it mean that, for some reason or other, it requires six or seven times the amount of effort to remove our natural accumulations of dirt per capita that it did in 1850?

Surely, with the well known advent of steam-laundry-machinery, now used all but universally, this cannot be the explanation. Nor can it be that modern vocations are dirtier than the agriculture, fishing, etc., of 1850, and that this explains the increase; for we know well that, even if the modern greasy mechanic is dirtier than his grandfather at the plow, it is not the greasy mechanic who supports all these laundries. We were neither dirty enough then, nor clean enough now, to explain the statistics physiologically. They must have an economic significance.

The data no doubt display in part the transition of female labor from house to factory. Laundry-work, as originally done in the home, went unenumerated. Thus this apparent growth in laundresses consists in part of the Quantity x already discussed.

Economics and Aesthetics.—But this cannot explain all. There has been too obviously an increase in the importance of fresh linen in social life, as the decades have passed. The fact is that the modern occupation of clothes-washing has left a long ways behind it any mere question of cleanliness. The bulk of all this modern so-called cleanliness spells *display*—competitive personal display. The heart of the market-system is display. Sales are effected, profits made, jobs secured, enterprises promoted and husbands acquired not by what a thing really is, but by what it can be made to appear to be.

Since the days of Roman law the motto of commercialism has been *caveat emptor:* Let the buyer look out for himself! All commercial incomes are made by skillful pretense, by half-truths or by "bluff"—not necessarily by actual, positive deceit, but by letting the other fellow infer from appearances something much more advantageous to himself than the seller knows to be the truth.

Therefore the individuals into whose hands fall the biggest prizes of commercial militarism must necessarily be those who are instinctively fond of display and self-assertion. This fact stands out at every protuberance of the advertising, drumming, promoting, egotistical market-system. Its agents are always well dressed. The diamonds of the drummer have become proverbial.

When one rises in the scale of commercialism to the higher levels, to the larger manipulators in the business-world, education and taste often prove capable of overlaying this tendency with a carefully cultivated modesty of manner, so that it is no longer crudely prominent. But it is there, just the same, underneath, like the armor of a cloaked medieval knight. Once show yourself to be a powerful adversary, rather than a social comrade, and you will see it revealed instantly.

All such types of men will patronize only women who are also instinctively skillful at display—with better or worse taste, like their male companions, but none the less display—and thus such women and their fashions have naturally survived over more modest ones, as the standards for all women. Then the universal presence in commercial circles of relatively large unearned, or easily earned, incomes adds oil to the fire. Competitive display thus becomes so universally the foundation of social life that its devotees often forget that they are engaged in it.

This policy is both the source and the fruit of large incomes. Its intensity accelerates accumulatively. It determines the idols in high places which the masses are called upon to worship. Then all the smaller commercial fry must inevitably copy, and very soon the pleasant and profitable policy of personal display has become at once an art, a national mania, a big business and an unconscious tradition of the times.

Thus, as commercialism grows upon us through the innocent hand of invention, modesty in dress and demeanor must inevitably retire gradually from our civilization, because unprofitable—or, in extreme cases, even fatal. It will do this with as little regard to the restraint of moral compunctions, and with as little need for explanation in terms of "original sin" or "perversity of human nature"—those idea-proof retreats of the intellectually lazy or the mentally timid—as in the case of shipwrecked unfortunates who, after two weeks in an open boat, turn to cannibalism as the only alternative to starvation. In a commercialistic civilization fashions necessarily run riot. Usually merely vain, they must gradually become sheerly immodest. By the relentless law of the survival of the fittest, the modest must follow the pace of the immodest, or else drop out of the race. And the remedy is not to be found in more modesty, but in more horse-sense in our economics.[2]

[2] The New York *Times* for July 26, 1914, quotes an English ''financier whose name is known in every country'' as saying:

> ''It has been a season of dementia. The people are going mad. Look how nations and private persons alike are spending money above their earnings. Look at the women, dressing, or undressing, in a fashion that makes every right-minded man blush for them! Look at the Futurist craze in paintings! Look at the rage for the Russian ballet, which is purely sensual satisfaction! The suffragettes are not any madder than the rest of the women of London.''

And Philip Gibbs, the novelist, as saying in the same issue:

> ''What is happening to the spirit of the English people, which is leading to so many strange adventures in feminine audacity and hastening the pace of the social whirligig so in the rush for pleasure? Men and women are losing all restraint. Is it only a passing phase, or is the end of this year's season the beginning of a greater end, involving the decadence of the English people?
>
> ''It has been a season of sensation. Never within living memory

We must not digress here from our immediate business, economics, to develop properly the ethics of this situation. It is enough to note that it was simultaneously with the twentieth-century acceleration of commercialism immediately after the Spanish War, just when arose that great outburst of inflation of capitalism which aroused the protest of even Russell Sage, that first became prominent that accentuation in the fashion for display in dress which is still in progress. It was no mere coincidence, and still less a whim, that just when America's first hundred-million-dollar corporation was being formed, it first became customary for women to wear white waists in winter. Up to that time white had been worn only in midsummer, and sparingly even then; it soiled too easily; and it was long after the white waist appeared before the fashion for white extended further. But to-day, only twenty years later, it seems inconceivable that it could have been so, so freely do women now wear white from head to toe, in the most informal places and the most inappropriate seasons.

While modern standards of taste have prevented, as yet, any revival of extremes in fashion as ugly as those of England under Elizabeth, or of France under Louis XV—both of which took their origin in an expansion of commercialism parallel with that now prevailing in America—yet all recent tendencies have been in that direction. We are copying, rather, from the Greeks the beautiful road to velvet vice.

One of the few measures of the growth of this tendency which submits itself to statistical estimate is the way womankind has recently learned to disregard laundry-expense. She has completely forgotton the days of her grandmother, when each woman

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has the town been so given up to gayety. Never in that time have its entertainments been so deliberately audacious in luxury and liberty. . . . It was the women who set the pace. At the very beginning of the season it was obvious that they were out for sensation, for audacity, for laughing defiance of old conventions, for a splendid time at all costs.''

This was printed at the acme of the worst depression of securities, in a ''silent'' crisis, which had been known in twenty years. It appeared just a week before all Europe was overwhelmed by an unexpected war, soon to involve over thirty nations! Was it so unnatural that Germany should go mad with militarism at a time when London and New York were going mad with other aspects of commercialism?

had to do her own laundry-work by hand, with water carried from pump or distant spring.

Moreover, it is particularly to be noted that this unenumerated growth in number of laundry-workers per capita, which is marvelous for a simple old-fashioned industry like clothes-washing, *records merely the growth of the personnel thereof.* It gives no adequate measure of growth in volume of output. For this we have no statistics. But during the sixty years the physical effectiveness of each working-person in collecting, washing, ironing and returning laundry-work has been so wonderfully multiplied by steam-machinery, automobiles, etc., *that the volume of work turned out by this seven- or eight-fold personnel is probably twenty times that of 1850,* per capita of total population.

And since this average per citizen must include every newsboy or slum-baby as of equal weight with any fop or lady of the avenue, what must be the ratio of increase in expense for laundry-work, measured not in dollars, but in material realities, for the well dressed class alone! Even in the poorer quarters it is marvelous how mothers and babies appear in fresh white each afternoon at five.

It is of course not argued here that all this laundry-work constitutes an unmodified loss to the community, nor that fresh clothing is not just as legitimate a source of joy, health and self-respect as food and lodging. But just as this analysis is seeking to show that a large and increasing portion of all food and lodging is being diverted, by the indirect influence of commercialism, away from its normal function in the support of natural, unself-conscious life, into competitive display in the cultivation of a false pride, so the same is argued as more obviously true of laundry-work.

Since no figures at all have been entered into the commercial half of this classification to represent this undoubted diversion of food and lodging, nor even of manufactured clothing, dressmaking, upholstery, etc., all of which have been classified as unqualifiedly productive of wholesome life, criticism cannot be aroused by our classification of all laundry-work as merely incidental to commercialism, to counterbalance.

The Opera under Commercialism.—For another instance of the many indirect ways in which commercialism robs our civilization, takes the highest form of musical and dramatic art known to American culture, the Metropolitan Opera, in New York. What is the true economic aspect of this institution?

Here we have, possibly with the exception of some "movie" stars, the most expensive set of entertainers known to history. For the principal singers the fees are rumored to range from five to twenty-five hundred dollars per night.

Why is this? Is this an instance of balance between supply and demand? Is this, as with the movie stars, a satisfaction of an enormous public want?

Not in any proper sense. These huge fees do not represent true economic demand. This is proven by two significant facts. First, the great mass of music-loving public is virtually excluded. The number of seats open to the public is so small, and their location so poor, that popular support must be dropped from consideration at the start.

Secondly, the opera, we are told, has not ordinarily paid expenses. It certainly has never been a money-making enterprise, in parallel with other lines of investment. The opera is maintained primarily by a few wealthy box-holders and private subscribers, as a symbol of exclusiveness enjoyed by an aristocracy of commercialism so tawdry at heart that its display of dress and personalities was for years the subject of public ridicule.

The vast tide of enormous incomes, either unearned in any way or else fought for, which concentrates itself into a pecuniary maelstrom in New York City demands some form of diversion which, in a land devoted to democratic ideals, *the ordinary person cannot enter.* This can be accomplished only by making it so costly that the ordinary person can afford it only occasionally, and the poor not at all. Indeed, the opera in its social sense cannot be entered at all except by the wealthy subscriber.

That is the soul of this whole enterprise. Some of its subscribers are persons of taste more modest than that mentioned; but the average is as stated.

To try to accomplish this end upon a plan which made big money by merely charging high, exclusive prices, while keeping costs within reasonable limits, would be impracticable. For then it might be paralleled by a competing opera content with smaller profits; and that the public could afford. No, the only way is to establish arbitrarily such exaggerated standards of pay for singers, and of costliness of everything expected of an opera-singer, resulting in such high admission-prices and such low profits, that *no other musical caterer can compete.* Repeated failures of attempts to do this have proven the truth of this statement.

This policy is reinforced by the character of the demand. While the subscribers include a few music-lovers of the highest culture, yet the average of those able to subscribe represents the typical psychology of him who can succeed at commercial combat—loving display rather than delicacy, whether in music, in the theater or in ladies' dress. These standards of taste are such that the opera has always been a performance of stars, who combine with musical talent the element of advertising, rather than a well rounded ensemble of instruments, chorus and solos. No schooled lover of music would admit that, among the singers, it is the highest artists who receive the highest fees. It is those most spectacular in color, though still in the realms of higher musical art.

In general, the music is excellent. Criticism from any authoritative source would be intolerable, if aroused. These people wish to prove to the world that they can afford the best music, quite as that they can afford the most spacious estates. But this same grade of music, or even better, might be had for a fraction of the price, as formerly in Germany, if it were not for this peculiar *demand for high prices,* which commercialism has bred in America beyond its point in any other commercial land.

Reversal of the Natural Law of Price and Demand.—For in all lines of supply, as well as in music, there exists always a market which caters to the rich. *In this market high prices are an inducement to trade.* A low-priced article cannot be sold, whatever its excellence. This is obviously true, for instance, of some lines of automobile-accessories.

So the opera is charged up in our statistical tables as accessory to the waste due to commercialism—not because opera is undesirable, but because the inspirational aid of this one is wasted upon those who do not give back to society its value. Under a national factory-system grand opera would be produced in twenty or an hundred cities, at prices accessible to virtually all. Then it would be a great aid in the enjoyment of productive life. To-day it serves merely as an intensifier of commercial militarism.

Aesthetic Decadence through Commercialism.—It is in this general sense that all of the activities listed under Class m are properly to be regarded as allied to commercialism, and as a part of the true measure of its growth. In all or part they either never would exist, under a rational economic system, or else they would be so transformed as to be unrecognizable.

Male readers may be slow to appreciate the place of tobacco in such a list, and female readers confections. Indeed, it is only in so far as they are now exaggerations or distortions that they belong there. But a sure accompaniment of this rising fashion of combat over commercial booty has been an exaggeration and deformation of our tastes in dress, diversion, food and stimulation, into rag-time, cabaret and Coney Island standards. Of this the treatment of cigarettes by our young men as if they were the breath of life, not to be dispensed with at any time or place, and the consumption of sundaes and cocktails by our young women at all hours of the day, is a significant feature.[3]

It must not be inferred from the above that all of the activities and commodities included in Class m are to be regarded as valueless. The author would not be misunderstood as advocating the abolition of all art, music and drama, nor even "white light and lobster." What is urged here is merely what sober, cultivated opinion will second everywhere, namely that *the bulk of all art, music, drama, literature and illumination is now being prostituted into a slavery to advertising-purposes which results inevitably in the most tawdry standards of taste.*

The absorption of much of our best delineative art and untold cost of press-work in the production of monkey-like fashion-plates, gaudy calendars, silly street-car posters, hideous "comic supplements" or flashy covers for cheap magazines, which exist solely for and upon advertising; the devotion of most of the money available for music to rag-time or cabaret favorites; the decay of literature visible in the "best sellers"; the degeneration of the stage, first from the legitimate drama to burlesque or musical farce, and then from that to vaudeville or "movies"; the guidance of our grand-opera along the ethics of the race-track rather than of true art; and finally the devotion of untold kilowatts of good electricity and ingenuity to the production of the most bizzare effects in colored lights, for electric signs, theater-entrances or anywhere else where money can be picked up by creating a cheap sensation—all these are instances of a gigantic and shameful waste of the highest possibilities for art now latent within our civilization.[4]

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[3] In a day when it is difficult or impossible to secure enough sugar for ordinary domestic uses in kitchen and dining-room, not to mention the preserving of fruit, etc., the fact that every city-block displays a ton of candy, at exorbitant prices, is certainly a sign of social development along lines which cannot be characterized as wholesome.

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[4] The growth of electric central power-stations in the United States from 1902 to 1912, as reported by the Census Bureau, is given below in Table 30, reduced to proportions with the varying population. While, of course, a large part of all this power is used productively, some of it for industrial motors and some for light for useful purposes, yet it is unquestionable, from our general observation, that the major portion is absorbed in the maintenance of those electric signs and commercial displays of light which have sprung up most markedly during the last two decades.

TABLE 30

Electric Central Stations, 1902 to 1912

	Quantities per Population			Percentage of Growth during Preceding Five-year Period	
	1902	1907	1912	1907	1912
Number of Stations per million of population..	41.7	50.0	50.8	20	2
Persons per ten million inhabitants..........	38.6	48.9	78.3	26	60
Horsepower per thousand inhabitant...........	20.2	42.3	71.1	110	66
Output Kw.-hours per inhabitant.............	27.2	61.9	97.0	127	59

In reference to the apparent decline in rate of growth, during the second five-year period, it should be noted that the first of these periods included one of the most phenomenal times of commercial prosperity and expansion which this country has ever known, while the second included one of its worst panics. It is remarkable that in spite of this fact, the second period should exhibit any growth at all. The fact that it actually witnessed a growth of some sixty per cent in the personnel employed and the current put out, per inhabitant, is more than remarkable.

They are due solely to the prevalence of commercialism, rather than to any spontaneous degeneration of public taste. In all of this the selective preferences of the public have little or nothing to do with the result. Does anyone suppose that we have overcrowded cars, or silly advertisements obtruded upon our unwilling attention, or tips in restaurants, or wildly fluctuating stocks, or bankruptcies, or slums, because the majority of us like those things?

Not at all. Not even a worthy minority wants them. None of them are expressions of free human choice. None of them are under "social control." They exist merely because, under the commercial system which virtually all uphold, they are indirectly of pecuniary profit to the few who do not use them; and because they are the best, under that limitation, which we who do use them can get.

Automatic Involuntariness again.—Standards of taste are the social effects, and not the causes, of our economic institutions. They, just as much as any other feature of life, are determined by the survival of the fittest to the environment; and commercialism is not an environment selective of high artistic aims.

Commercialized Art.—If art must be bought and sold in the market at auction, as a handmaiden to commercial profits, then certainly *that which permits the largest margin between original cost and apparent worth will make the greatest profits, and thus will survive at the expense of better art which makes less show.* But there is no better definition of "tawdry" than that which embodies the most pretense upon the cheapest possible base. Yet that is exactly what commercialism is selecting automatically for thrusting upon us in every walk in life—on the stage, in literature, in women's dress and complexion, in our restaurants and in the amenities of the overcrowded street-car—because it leaves the largest margin above costs for profits!

Just as, in every field of economics, commercialism is cutting down the quantity and quality of commodity and service to the lowest which the "traffic" will bear—meaning the lowest which the profits will bear—so also, in the realms of art, commercialism is likewise reducing everywhere the practicable standards of public taste—and by exactly the same process—to that minimum of beauty and dignity which will yet permit that reduced volume of patronage which results in a maximum of net profits.

For that maximum is no more attained, where art is concerned, when the grade of art is the most pleasing to the majority of the people than it is, where more sordid commodities are concerned, when the selling-price is that most attractive to the largest number of people, namely, the lowest practicable price, the factory-system cost. Under commercialism it is literally and relentlessly true, of cabbages and concerts alike, that *the maximum profit is secured to the seller only when a major fraction of all those who stand ready to be attracted have been driven away*—either by high prices or by tawdry quality, or by both. Only the cheapest grades can be retained.

Astounding as it may seem to the aesthete, it is nevertheless true that our prevailing standards of popular art are neither a natural expression of the people's taste, nor even an upward strain therefrom induced by the efforts of the lovers of true art. They are, instead, a long way below the people's true preferences —the lowest which the people will accept—exhibiting one of the many instances of forced degradation which we owe to our faith in commercialism.

Astounding as this must seem to anyone who has soaked for a lifetime in the common belief that commercial "hustle" is the prime motive force in economics, and spontaneous individual taste the sole determinative force in standards in art, yet it is absolutely true, in every department of trade, art and education, that commercialism paralyzes and degrades. Worse than that, *it dominates, controls and censors.* Taste may demand, yet the pocket cannot command, anything which it does not pay the commercial world to let through to us. Whether it be supplies of food, of fuel, of clothes, of shelter, of education, of art, or even of religious inspiration—wherever such things (or the tools which they must have) are bought and sold for a profit, or even are presented to us by the charity of those whose life-standards have been formed in profiteering, there the major demand latent within the people, both as to quantity and as to quality, *is rejected.* Only that is passed through which will result in a maximum profit to the dealer.

This is not a psychological fact in any degree. It is merely a mathematically relentless result of our so arranging our economic organization, through our faith in profits as the best form of industrial reward, that dealers everywhere thus repel a major portion of their possible trade, simply because it pays them to do so. If one could constrain matters of artistic taste within rigid units of measurement, as one can commodities, then the mathematical formulas of Note 1, on "Charging All the Traffic will Bear," would apply equally to all matters of popular art.

The next time you visit Coney Island note how far standards of taste may be sagged by being enslaved to profits. But do not be misled into thinking that these standards are the best which public patronage will tolerate. Instead, *they are the worst.* They are the worst because the worst is the cheapest, and a profit-paid purveyor makes his best money on a restricted volume of ultra-cheap goods, well advertised.

These degraded standards of taste represent merely that same twenty per cent of the real popular standard, as to quality, which Chapter XI depicted as the actual volume of trade, in relation to the people's desires and powers, as to quantity. Economic equilibrium tyrannizes over art and ethics exactly as it does over nutrition. Do you doubt that the Coney Island commercialists would instantly make these standards cheaper and more sordid if the people would still "stand for it" across shop-counter, to that twenty-per-cent extent which we have proven to be the commercialist's mecca of maximum profits?

To fail to take some cognizance of all this ethical and artistic loss due to commercialism, in our statistical analysis, would be a fault indeed. Class *m* represents our attempt to do this. The reader is free to improve upon the method if he is able.

Confusion, as well as Cheapness, Profitable under Commercialism.—Then commercialism acts to vitiate, degrade, blunt and dilute our standards of taste in still another way. For it demands, in the interest of profits, a constant outpouring of numerous new brands of everything, offered solely for the sake of the profitable notoriety to be gained in advertising them. This policy, so familiar in the multiplicity of new brands of soap, tobacco, collars, automobiles, etc.—of each of which we now have twenty brands where one standardized grade of quality is needed—is naturally reflected in artistic circles in the frequent appearance of new "schools" of art, such as the "cubist" or "futurist" fads in painting and music.

Thus in every walk of life commercialism has all but lost us our natural ability to discern the insincere from the sincere. For these grotesque furors of the day do not even bear witness of a sincere, if mistaken, groping amidst the unknown for suspected latent value. They consist crassly of posing for effect, for the sake of personal advertisement or profit, exactly as does the professional drummer or promoter.

In this apparently uncharitable indictment no taunt is flung at the individual, but at that horribly mistaken system which condemns to penury every artist who has not yet achieved notoriety, and which inevitably incites in most patrons of art an unnatural and unwholesome love of being in fashion. For in all the less extreme walks of art, music, histrionics and lyceum-oratory or literature, this same force is everywhere at work. Sometimes it is ruinous in its destructive success. Sometimes it fails either to spoil completely the art, or to accomplish the launching of a mere fad. But everywhere it is detrimental. Everywhere it makes our art poorer and less sincere than it naturally would be.

Economic versus Moral Dissipation.—A final reason for this excursion from economics into ethics, and for the inclusion in Subclass *m* of many of the items whose presence there we started to explain, is that they bring one face to face with the dividing wall between personal or moral dissipation, on the one hand, and economic dissipation on the other. *Economic* dissipation—the waste of energy in doing honestly and well those things which do not aid the life-support of the Consumer—is normally conducted by persons who cannot at all be classed as immoral. But one of its most wasteful economic features is that it is always conducive to purely *personal,* or immoral, dissipation in someone else.

Personal dissipation, on the contrary, does not produce economic dissipation, but ends the evil in itself. Hence it is important to note that Subclass *m,* where it refers to personal dissipation at all, records not the moral loss involved therein, nor the destructive effects of bad example to others, but merely the economic waste of good, moral human energy which otherwise might have been devoted to producing food or shelter, which was lost when the champagne or race-horses were produced —probably by the most moral of workmen.

Indirect Commercial Waste:—Returning now to the more tangible aspects of Tables 27, 28 and 29, the inclusion of a large portion of all transportative activities, and particularly those of the automobile-industry (under Subclass *p*) as commercial in character, needs debate.

It is especially true of these industries, over others, that not only do they bear the usual parasitical burden of commercialism in the securing of their trade and the maintenance of their rates, but even those of their individual workers who actually perform the transportation, or the manufacture of the vehicles, must be classed largely as "commercialist," in the sense of being a contributory cost upon other industries, because they perform transportation which would never occur were the Ultimate Consumer in control. It is unproductive transportation incidental to the warfare for profits.

Thus our passenger-trains and hotels are patronized far more by drummers and businessmen than they are by those engaged in helping the Consumer. Our freight-trains are congested chiefly by goods undergoing a shipment which, under any national factory-system, they never would have incurred.

For instance, the policy of governmental control of the railroads by the British government, as an aid to the prosecution of the war, finally resulted in attention to this matter of unnecessary shipments. Great saving was effected by limiting shipments to routes reaching the Consumer as directly as possible. Thus, in a single, unchanging commodity, that of coal shipped by land—only a fraction of the total coal-traffic—they were able to eliminate *over seven hundred millions of ton-miles annually,* merely by assigning to certain districts of mines certain districts of population, to be served exclusively thereby, instead of permitting the mine-owners to compete with each other indiscriminately in all districts, as is normal under commercialism!

An official bulletin issued by the War Industries Board of the United States, under date of Nov. 2, 1918, throws similar light upon the manifold savings to be expected from the mere unification of industry under single national guidance, as follows:

> "The standard-gage steam-locomotive industry of the United States, operating under the direction of the War Industries Board, has increased its rates of production approximately 100 per cent in the past three months. . . . This achievement is particularly noteworthy from the fact that, in bringing about the tremendous jump in production, it has been unnecessary to expend a dollar to increase plant-facilities or enlarge the existing works, items of considerable expense in the development of most of the other war-industries of the country. *Redistribution of orders and concentration by each of the plants on particular types of locomotives has made*

possible the intensity of effort unprecedented in the industry." (Italics mine.)

In this remarkable case of gain in efficiency there did not occur a single transfer of a workman from commercial to productive fields of effort, nor a dollar's alteration in the amount of interest-payments involved. Yet these two sorts of transfer of energy from productive to commercial fields are the only ones which this book has attempted to measure, in its statistical picture of the gradual alteration of the country's efficiency of economic organization. There are enormous fields of waste due to the chaos called commercialism which have necessarily been omitted from our statistical estimates altogether.

In the English illustration arose no question of repeated handlings due to change of ownership at each stage of manufacture, upon which so much stress has been laid in foregoing pages, because the coal remained unchanged in form. The saving effected was merely that of the interminable confusion of cross-shipments and long hauls, due to the anarchic license of every mine-owner to sell coal anywhere his salesmen might find a buyer.

In America, where the distances are far greater, this is all going on at a far greater rate of loss, in a long list of staples, with the "repeated stage" phenomenon quite in addition. Pig-iron is made in eastern Pennsylvania, then shipped across the mountains to be rolled into bars, which then travel to New England to serve as "raw material" in her many ingenious industries, finally to reach Arizona or Oklahoma as supplies for further developments. At each stage manifold negotiation must occur.

Consolidation, so far as it has proceeded, has remedied this somewhat, it is true. But the lesson of these statistics, we shall see later, is that *consolidation is daily becoming less and less*, relatively to the whole. There is such a continual flood of new, unconsolidated businesses that we are suffering increasingly from *decentralization and confusion of industry.*

In urban traffic it is the same. A large portion of the office-workers who crowd the elevated and subway-trains during the rush hours, or of shoppers who flock into and out of the retail district each pleasant afternoon, or of short-distance erranders on the surface-cars all day long, are bound upon missions which are quite unnecessary and unproductive, in the factory-system sense. Even if this same amount of transportation were absorbed in mere recreation—which might be partly true if the cars were made as free as the sidewalks—it would still be far more profitable to the community than now; for *recreation is a necessity of life, while combat is not.*

But as it is now it is sheer waste. It neither cheers nor inebriates; it simply worries and wears. If any transit or efficiency engineer sincerely wishes to relieve our transit-systems of congestion, he is recommended to consider first the elimination of all passengers who travel solely in order to bargain (by eliminating all bargaining itself), and of all shipments of goods which change ownership, or are specially routed, only in order that an extra profit may be collected from the Consumer thereby.

It is in the country's potentialities for three things in particular—transportation, light and printing—that commercialism has been most sinful in its diversion of good into evil ways. It is not that higher profits are made in these lines than in others, but that in these lines more good, honest toil is wasted by diversion into ends which do no good to anyone, and much harm to all, than in any other field.

As to automobiles, the position taken in Table 23 is not that four-fifths of all these vehicles are what is known as "commercial" cars, for it is peculiarly the so-called "commercial" cars which are more purely employed in production, while it is the pleasure-automobiles which are devoted, indirectly, to commercialism as the term is used here. Our position is, as to the "goods-vans" (to get away from the confusing term "commercial"), that the same proportion of their transportative possibilities is wasted as applies to railways or street-cars.

Nor is it our position that automobiles, when used for pleasure-purposes, are not commonly physically beneficial. It is that, even when these costly playthings are really used to recuperate tired nerves, rather than for display or dissipation, *they recuperate nerves which have been exhausted either in commercial combat or else in excesses in that race for prominence or diversion which is the inevitable accompaniment of unearned or fought-for incomes.*

Moreover, a large fraction of even those machines which are owned by salaried or wage-earning producers, are owned largely for the maintenance of position in this same race—although success in this line is not profitable to the wage-earner in any sense, as it is in a narrow, pecuniary sense to the commercialist. They are owned because, in the modern commercialized, congested city, an automobile is virtually a necessity of existence. That is to say, even that portion of the automobiles which is able to prove its innocence of all these charges, in that it furnishes wholesome recreation to true producers, still falls under the shadow of being a requisite of a community-life which has been unnaturally congested by commercialism into cities of exaggerated size. Life in these cities has become all but intolerable unless one can enjoy periodic excursions into the country; and for this the automobile has no equal.

But, since it is inevitable that during the next quarter-century civilization must find some way of reversing its present horrible and unnatural congestion of life in cities, it is equally inevitable that the automobile must recede, relatively speaking, from its present dominance, as the bicycle did during the preceding quarter-century. The automobile, like the street-railway, is a creator, because a permittor, of congestion in cities. (See Chapter XXII.) Since we have found it impossible to reduce to statistical terms, directly, that most important item in the social cost of commercialism—congestion in cities—the automobile offers one indirect means for attaining that end.

For similar reasons the bulk of all the imposing array of sanatariums, "health-farms," etc., which have sprung up recently to aid in staying well those whom the congested life of the city has upset, should properly be included as a disguised branch of commercial militarism, just as the cost of a Red Cross service must be charged as an item in the cost of martial militarism. Indeed, all the eleemosynary and charitable institutions should be classed as costly departments of commercialism. For their employees, although often performing menial tasks and always receiving their pay in the form of wages or salaries, bear the same relation to commercial militarism as those who bury the dead, or collect battle-field debris, bear to the activities of an army in the field.

But here, following our avowed policy of being fair in our statistics by balancing one doubt against another, four-fifths of the automobile-industry has been included, and all the sanatariums, hospitals, jails, etc., left out. Thus, the longer one ponders upon this topic of commercialism versus production, the more one will be impressed with the fact that these statistics tell less, rather than more, than the truth.

Social Metabolism.—In all these infinitely ramifying influences of commercialism, penetrating and vitiating every walk of life with evils which we often cannot recognize now as such, there is one guiding principle of which to be certain. This is that no mistaken or evil economic influence ever gets itself converted into good *merely by being lost to identification amidst the maze.* In the intricate metabolism of the body politic each atom of productive energy works its constructive good, and each bit of combative commercial poison its destructive evil, as surely as, within the human body, each molecule of food finds itself differentiated with unerring accuracy, within the darkness and subconscious reactions within the stomach, from each molecule of poison.

Sometimes we identify poisons before they enter the stomach, by their inherent nature. Sometimes we identify them by their effect after being eaten. In the case of the body politic it is the same. Sometimes we can condemn an activity because it is combative, and therefore we know that it will be destructive in its effects. Sometimes we observe that the effect of some activity has been destructive, whence we may know that it must have been combative, and to be classed as commercialism, rather than co-operative and productive. In either case our statistics may err, but nature never does.

Statistical Conservatism.—But whatever error of this sort we may have made in Table 28, by our inclusion with commercialism of some features, such as those just discussed, regarding which the reader may hold question, yet this fact cannot in any way vitiate our main conclusions. For *it is those subclasses of activity which are most unquestionably commercial and combative in their natures which have grown more rapidly than any of these more doubtful, outlying factors.*

It is actually true, therefore, that our inclusion of these doubtful factors in some of the later totals, while it may have increased the apparent total *volume* of commercialism, yet it has appreciably diluted the apparent *rate and acceleration of its growth.* Yet this last factor is the one of the greatest significance for the future.

For it is not any particular *volume* of commercialism which is our best indicator of our coming social fate, for we have no absolute standard of comparison, but the *rate* at which commercialism, relatively to production, is growing upon us. For our measure of its volume, however carefully our numerical data may be sorted, is not a standard thing, from which quantitative inferences can be drawn. We have had no past experience with commercial crises like this, from which to gage the future quantitatively.

But what every man does possess is a view of the conditions of the day. Our morning newspaper tells us, in one sense, what is the degree of instability which we have reached to-day. So, starting from that, those statistics which tell us that our progress in this direction is being made at the greatest *rate* carry the direst menace.

Yet all this questionable inclusion by the author of doubtful factors *dilutes,* rather than exaggerates this rate. All these facts will become clearer from the next table, Table 31.

Relative Rates of Growth.—In order to exhibit the relative growth of the various subclasses of Tables 27, 28 and 29 in a form convenient for comparison, they are restated in Table 31, each in terms of 1000 for the year 1850. Below each such line is given the growth for each decade, in percentage. It must not be forgotten that all these statistics refer only to *personnel,* and that they are on a per-capita basis.

Table 31 reveals the relative rates of growth of different subclasses of activity, from decade to decade, without possibility of question as to correctness of classification or deduction. Except for the two estimates at the bottom, the figures stand just as they came out of the census-reports, translated merely into proportions per million of population.

No economist may dare to dodge the force of Table 31. For it shows that the one subclass which far exceeds every other in its rate of growth is Subclass *j*. *Yet this is the one subclass most unquestionably commercial in its nature.* The two subclasses next following it in rapidity of growth are *l* and *m*—classed respectively as contributory to and resultant from commercialism.

It is in these directions, then, rather than in any branch of technical art or learning (in which we think that we are growing most phenomenally) in which America is making its most rapid strides forward.

Closely coinciding with these most active subclasses is the author's personal estimate of Total Commercialism *p*. The only subclasses among the productive occupations which can even approach these commercial subclasses in speed of growth are *d*,

TABLE 31

RELATIVE GROWTHS 1850 TO 1910

Sub-Class	1850	1860	1870	1880	1890	1900	1910	Aggregate, 1850–1910
Productive Population								
(*a*) Agriculture and Food-supply	1000	997	1043	1047	996	934	937	....
Growth per decade (%)	....	0	5	0	−5	−6	0	−63
(*b*) Textile and Clothing	1000	1375	1340	1486	1684	1702	1780	....
Growth per decade	....	37	−2½	11	13	1	5	780
$a+b+x$	1000	936	934	870	806	706	607	....
Growth	....	−7	0	−6	−7	−12	−14	−393
(*c*) Mechanical	1000	1133	1267	1292	1628	1702	2086	....
Growth	....	13	12	2	26	5	22	1086
(*d*) Transportation and Communication	1000	1166	1601	1733	2522	2905	4891	....
Growth	....	17	37	8	4	15	68	3891
(*f*) Technical	1000	2565	2454	3728	4594	5330	6900	....
Growth	....	156	−4	52	23	16	30	5900
Commercial Population								
(*j*) Directly Combative	1000	1311	1759	2137	4530	6108	9260	....
Growth	....	31	34	21	112	35	52	8260
(*k*) Mercantile	1000	1169	1355	1403	1558	1559	1636	....
Growth	....	17	16	7	11	0	5	636
(*l*) Munitions and Panoply	1000	1356	1832	2457	3514	4497	6370	....
Growth	....	36	35	34	43	28	42	5370
(*m*) Divertive and Absorptive	1000	1569	2442	3444	5145	6120	7870	....
Growth	....	57	56	41	49	19	29	6870
Estimates								
(*o*) Arts and Crafts	1000	1227	1208	1406	1494	1749	1884	....
Growth	....	23	−1½	16	6	17	8	884
(*p*) Total Combative	1000	1306	1853	2418	3520	4405	6480	....
Growth	....	30	42	30	45	25	47	5480

"Transportation and Communication," and *f*, the "Technical" subclass. All the other productive subclasses have either risen much more slowly than these, or else *have actually fallen.*

Greater Accuracy since 1870.—As to the exact order of precedence of these subclasses in rate and constancy of growth, perhaps it would be more reliable and accurate if the figures previous to 1870 were discarded. This applies particularly to technical matters, which were held of little importance and not recorded accurately previously to 1870. Viewing, then, only the percentages of growth during the forty years from 1870 to 1910, there results the order of precedence in rate of progress shown in Table 32.

TABLE 32

Relative Rates of Growth, 1870 to 1910

		Per Cent
Subclass	*j.* "Directly Combative"	426
"	*p.* "Total Commercialism" (Author's Estimate)	249
"	*l.* "Munitions and Panoply of Commercial War"	247
"	*m.* "Divertive and Absorbent"	222
"	*d.* "Transportative and Communicative"	165
"	*f.* "Technical"	181
"	*c.* "Mechanical"	65
"	*b.* "Textile and Clothing"	33
"	*k.* "Mercantile"	21
"	*a.* "Agriculture and Food-supply"	−10
"	$a + b + x$	−35

The last quantity in Table 32 $(a + b + x)$ is based upon the reasonable assumption that the bulk of the additional population appearing each decade in the census-enumeration, as "occupied," came from the home into the factory and hence that, previous to enumeration, it had been engaged in the preparation of either food or clothing, The quantity $a + b + x$ therefore represents, with the greatest probable accuracy, *the total population, enumerated or unenumerated, which has been engaged in all those many and varied tasks which together create our supplies of food and clothing.*

It is this class of occupations, therefore, which is seen to have done all that wasting away which has been necessary in order to supply personnel to those other occupations, some technical but chiefly commercial, which have been so rapidly increasing. If we had not already ascertained (from Tables 20 to 24, inclusive) that our supplies of raw material for food and clothing, per capita, had more than held their own throughout the half-century, while the supply of manufactured articles had grown beyond the ability of either statistics or imagination to follow, we might see in Table 32 an immediate prospect of national starvation or freezing.

The Prospect of Famine.—But the facts do not permit the prediction of absolute famine. It is merely *relative famine* which is imminent, as yet; but that may be bad enough to be worthy of serious attention. Plainly we are not yet sufficiently informed for a safe drawing of conclusions as to the future. We shall not be so, indeed, until the chapter upon unemployment has been finished. Probably our trouble will be, as in Germany to-day, not that there is not enough food in existence, but that masses of the people cannot buy it.

Non-combatant Costs.—Finally, in regard to subclasses *l* and *m*, or estimate *p*, it must be said that it would be just as fair to estimate the social burden of martial war by counting only the soldiers involved, omitting all cost of munitions and supplies, or red-cross and hospital service, all incidental destruction of property, and all interruption to the pursuits of peace, as to estimate the burden due to commercial warfare by omitting all its indirect but indubitable costs. Even when we have included all the time, effort and money misspent upon silly advertisements and tawdry amusements, or upon outings in which the beauties of nature are quite forgotten in the craze for speed and ostentation, as indirect costs of our commercialistic organization of society, there has still been omitted that greatest of all objections to both military and commercial war, namely, the *misery and discouragement of non-combatants,* in both belligerent and neutral territories.

For these non-combatants number many times those directly engaged in the fight. Not until attention has been centered upon the ethical costs of commercialism can the justice be realized of charging against it certain items which appear to be purely economic and quite innocent in themselves, as has been done here.

Reform versus Priggishness.—To avoid misunderstanding it should be added that there is no desire here to compare our present organization of society with some mythical one in which no one would do any wrong, nor with one in which the number of automobiles, for instance, would be kept down to the number now used sanely and wholesomely. The real desire is merely to attain some numerical estimate of the degree to which automobiles, theaters, confections and other harmless things are now *misused*—not because of inherent individual folly, but solely because this fault in our method of social organization, like the scattering of job-tickets on the ground before the messenger-boys, offers premiums to human nature for misusing them.

Commercialism becoming Critical.—All of the individual subclasses of commercial effort, apparently excepting "mercantile," have shared in this general rate of increase of commercialism as a whole. Subclass *j*, "directly combative," has grown so rapidly that by 1910 it had already surpassed ninefold of what it was in 1850, by far the greatest rate of growth in the tables. At its average rate of growth during the sixty years *it will have passed twelvefold by 1917, and be approaching fourteenfold by 1920!*

On the other hand, if its average rate of growth for the last three decades (which is higher than for the preceding three decades) be even approached during the present decade—and there are many signs that the rate is continually being accelerated—then this subclass will have attained by 1920 *fifteen* times its proportion in the population of 1850. We shall show later that its prosperity, prestige and power in our economic, legislative and social life has grown at a rate even higher than this. Our "invisible government" which Theodore Roosevelt so vigorously condemned begins to become dimly visible.

Science and Technology as Aids to Commercialism.—While the growth of the technical arts, crafts and sciences has gone hand in hand with that of commercialism, yet the point is not merely that the latter have grown more rapidly—that apparently we cannot have progress in technique without a parallel expansion of commercial militarism. *The point is that commercialism has been permitted to grow at all.*

For a progress in science of industry which has been competent to substitute steadily the factory-system, as a means of production and interchange, for the crude and inefficient cottage-system, during more than a century past, would naturally be expected to have accomplished at the same time, upon a national scale, *the abolition of that feature of the cottage-system which lay most directly at the heart of its crudity and inefficiency, namely, ownership-in-industry.* Our increasingly scientific sociology should certainly have been expected to eliminate, first of all, that most unfactorylike anarchy called "business."

Yet all our boasted technical progress has in reality accomplished the exact opposite of this. While the academic, theologically governed colleges of 1850 have been melting gradually into our scientific universities and schools of technology of 1910, this worst attribute of the archaic cottage-system of industry—ownership-in-industry—has ramified indefinitely and gained exceeding vigor. Indeed, the food for its growth, the oil poured upon its feverish fires, have been *those very inventions and discoveries in pure and applied science which it is the proud boast of the modern university to promote.*

Yet never once has any university or college, nor any other "foundation" by the wealthy for the promotion of knowledge, ever publicly, officially and authoritatively denounced this most unnatural progeny of science seduced by commercialism. Never once has any individual professor or lecturer been permitted to approach such an act, on his personal responsibility, that he has not promptly felt the weight of academic discipline. Never once has any of the national technical societies debated, either broadly or penetratively, this which should long ago have been their first professional topic, because their heaviest responsibility, namely, the unscientific, anti-efficient growth of that particular and only original sort of anarchy called commercialism.

Ethical versus Brute Economic Forces.—Moreover, it is constantly being urged that all those social features which all agree are undesirable, are steadily and gradually being eliminated by progress in individual intelligence, taste and morality. But if this be true—if individual intelligence, taste and morality have any direct power in the matter (which they have not, being results rather than causes)—*then their first effect must have been visible in a marked decrease in commercialism, as a medieval lack of system, law and order.*

But this supposition, it is clear, is just the reverse of the truth. Not only has no progress at all been made in the gradual abolition of commercialism, but not even has there been any definite complaint or protest voiced against it, outside of the author's writings, the tabooed doctrines of socialism, and various other radical utterances which are still less recognized in university-circles as forming a part of our progress in science. Moreover, socialism, which alone is definite, protests, in effect, against only one aspect of commercialism—capitalism—and then only in the name of the wage-earner; but that is a very different thing (as will be seen later, in Chapter XXIV) from a scientific protest against commercialism as a whole, and in the name of the Ultimate Consumer.

General, popular, unscientific protest has been growing, no doubt. But this does not arise in scientific sources, is not the result of progress in our educational intelligence, and does not address itself to the real cause of the evil. Instead, it arises amidst the general public. It is a protest from the heart, unguided by the mind. Its source is the rapid and obvious growth of the evil results themselves of an institution which is not itself condemned by any university in the land. Its every aspect betokens a rapidly increasing confusion of mind, rather than growth in clarity of thought. It has arisen as the human heart's simple-minded response, among the uneducated masses rather than the college-bred few, to the repulsive fruits of growing commercialism. It has no connection whatever with any actual diminution of that evil.

Finally, this growing protest does not address itself to any real cause whatever, but rather to a multiplicity of superficial results, such as congestion, graft, interruption of production, white slavery, divorce, high prices, etc. It is anything but penetrative, accurate, consistent, certain. A chaotic confusion of conflicting ideas, accomplishing nothing while the evil grows, is its most significant characteristic. The only basic point upon which agreement in spirit can be found—and this too is significant—is that we are now being dosed with too unyielding a reverence for traditional law, and with too little reverence for the higher duties of mental growth, institutional change, equity of result and humanity of spirit.

Certainly up to 1910, at least, we have positive statistical evidence that this growing protest had accomplished, in the direction of effective institutional reform, *less than no result at all;* for it had not been able to prevent the positive growth of commercialism, the source of all these evils. It had not even been able to prevent the rapid *acceleration* of that growth, beneath the very noses of our schools of scientific sociology.

Automatic Involuntariness again.—Indeed, so far as the abolition of commercialism is concerned—a program which demands first the checking of its acceleration in growth into, at most, a steady, if positive, rate of advance, then the gradual annulment of that positive rate into zero, and finally the reabsorption of all its economic accumulations during the last seventy-five years—in so far as that program is concerned we are to-day progressing rapidly and acceleratingly backwards. Modern public opinion is now engaged in the illuminating task of learning that it is as helpless against the growth of commercial militarism as it is against that of martial militarism. Our progress in scientific social intelligence, to date, has been exactly as effective in controlling the expansion of commercialism as the abolition-societies of 1830 to 1860 were effective in accomplishing the abolition of negro-slavery—an institution which in 1860, just before its complete collapse, *was many times more prosperous and powerful than it had been in 1830, when the abolition movement against it first took definite form.*

The abolitionists were as helpless against slavery as the "copperheads" were in their efforts to annul the war which abolished slavery. Both were as ineffective as is the pacifist of to-day, either to prevent martial warfare or to annul that commercialism which they say is the cause of all war. All such will continue to be quite ineffective, in their most commendable sentiments, until we acquire a real science of sociology, built along the same lines as those material sciences which have given us such awful command over the inanimate forces of earth, sea and air—until we have learned to be as *accurately indirect* as we are in all our other technical lines of endeavor.

When we wish to send a message across the Atlantic we no longer go out and try to shout loud enough, nor to wave a signal. Instead, we shovel some black stones into an iron door—and, after many an intermediate transformation, the energy of the coal travels across the fogbound, storm-tossed waste with lightning-speed. When we have learned to be equally indirect in our efforts at sociological reform we may first expect to see some signs of success. To-day we are merely shouting and waving.

Wanted—a Science of Sociology.—For some decades now the universities and schools of political economy have had piled up in their libraries ample statistical basis for the detection of this growing source of national inefficiency; but in its digestion and assimilation into world-guidance they have displayed the torpor of a gorged python. If our national life and growth had been wholesome in its major aspects, if our universities had been intellectually free, brave and responsible, if our chambers of commerce had been condemning gaps of ownership *between* factory and factory as rigorously as they do all such *within* every factory—as they should have done—then commercialism would indeed have been steadily upon the decrease during these last sixty years.

Then effort at production upon the farm would have decreased only as it was replaced by that technicalism which is productive in a far more effective sense. Ownership-in-industry would have declined everywhere, because everywhere as objectionable as it is within the factory. The schools would have condemned it as unscientific. The practical men would have denounced it as inefficient and unfactorylike. Between them they would have found means for its repression—by that same consolidation and unification which has been proceeding within the factory, but much accelerated.

For, even if this abnormal and ugly growth had not yet yielded to pressure from the nation's growing standards of taste and intelligence, as promoted by art, science and education, yet it certainly should have been expected to respond to that voracious appetite of the modern man of affairs, guided by the new profession of "efficiency-engineering," for mere material efficiency. But exactly the opposite has occurred. While consolidation has proceeded apace *wherever it might expand private profits,* outside that field it has been so utterly neglected that we are drifting rapidly backwards, towards a chaos of increasingly decentralized commercial anarchy.

The "practical" man of business is not sufficiently practical in a broader sense to see that what he gains as a commercial militarist he loses ten times over in his domestic role of peaceful Consumer. Either the average businessman cares far more for dividends than he does for either national efficiency or domestic economy, or else he is incapable of any higher idea of efficiency than that enclosed between the covers of his ledger.

Fate Challenges our Candor.—The fact that none of these intellectual or ethical forces, in spite of their admittedly rapid growth, has had the slightest effect in diminishing the volume of commercialism, nor even of retarding its growth sufficiently to prevent its outstripping every other feature of social life—nor even of preventing its recent acceleration—is the most serious one now confronting the students of the destinies of our world-civilization. If a rapid and brilliant advance in culture, as witnessed for this country by the growth of Subclass *f,* will neither prevent an outburst of martial militarism from overwhelming every other industry of Europe and America with one of the most cruel wars of history, as in 1914, nor be able to put the brakes upon an even more rapid advance of commercial militarism here in America—with its equally cruel, if not so hideously obvious, atrocities—then to what is civilization to look forward?

Is it not about time, therefore, that the universities, with their libraries crammed to overflowing with statistical social data, were put under stern pressure of public opinion to speak up with a little courage and accuracy of prediction of social events? With a true science at command, accurate prediction has always been easy. With prediction accurately made, remedy is always easy.

But the so-called political science now put forth by our universities not only fails to predict the most gigantic social events with an accuracy adequate to command public confidence, and therefore competent to forefend coming cataclysms. *It fails even to analyze its own records with sufficient acumen to identify the larger forces at work in our very midst to-day!*

CHAPTER XVI

WAGES AND SALARIES

Up to this point only classification of *population* has been attempted. Only heads have been counted. But from this point forward, in order to estimate commercialism quantitatively, some attention must be given to the character of the heads.

So far as numbers go, the commercial population is so small a fraction of the whole—only about one-fifth of the total "occupied" population—that if no warning were given it might be considered insignificant and negligible. But this small fraction of the population includes most of the nerve, energy, and high administrative ability of the land. Therefore, before any estimate of comparative economic energies may become possible, estimates must be made of two preliminary things, in addition to the classification of population just completed. These two things are:

(1) The relative average ability of the individuals forming the commercial and productive classes respectively; and

(2) The transfer of economic energy from individual to individual in the form of money or its equivalent—not for useful service performed or commodity received, which would not be a real transfer, but an interchange, of energy—but money transferred *without any counterbalancing return of real value—life-support.* It is the first of these two topics which forms the business of this present chapter.

When two individuals who are to be compared as to their relative economic magnitudes are both of them in the productive ranks, there can be no doubt that their relative capabilities may properly be measured by their relative incomes; for both outputs are sold to and appraised by the Consumer. At least, this is true of all individualities except a peculiar few, such as scientists or the like, the value of whose output cannot be appraised by the mass of Ultimate Consumers.

But when it comes to comparing a producer with an economic combatant, does this still hold true? If the fighter be engaged in destroying life-support, or in doing things not desired by the Consumer, as has been held here to be true, and yet he is paid by the Consumer, is it then fair to rely upon his income as a gage of his ability, or of his economic energy?

Of his ability, no. Of his economic energy, yes. Since combat is now made a prerequisite to the privilege of productive effort, combative ability is naturally paid at a very much higher rate than the same physical ability when exerted in productive lines. This higher pay measures the larger quota of economic energy—not which the fighter produces, but which he abstracts from the community, and absorbs or dissipates it.

Successful commercial fighters are paid at excessive rates. Their salaries, quite aside from their incomes from property, run into the tens and hundreds of thousands of dollars, whereas those of the ablest producers seldom exceed five thousand, and only rarely ten thousand. For instance, in the more modest grades of pay, a commercial drummer will earn from two to five times the income awarded to a skilled machinist. Yet the average drummer is far below the average machinist in intelligence, and in every other sort of ability excepting nerve.

The inequity of this is recognized here and there, even among businessmen themselves. Mr. Mellen, president of the New Haven railroad during its expansive career which ended in its troubles of 1910-13, is quoted by the *Railway-Age Gazette* for Nov. 14, 1913, as saying:

> "I believe that the paying of tremendous salaries to corporation officials is a waste of money. I believe that no man in the country is worth more than $25,000 a year. And I know I would work fully as hard for the New Haven railroad for $25,000 as I did for $60,000 or $75,000."

But the fact remains that these enormous salaries are paid. They offer a striking contrast with the average wages or salaries paid in the productive fields.

Analysis Resumed.—The next step in this present analysis is to apply these contrasted rates of income to the personnel of Tables 27 to 31 to ascertain the classification and relative proportions prevailing, as to *the assignment of purchasing-power* *due to activity* to the several sorts of vocation, and thus to the hundred million individuals of the land. When we have added to this, as will be done in a later chapter, the allotment of *purchasing-power due to passive capitalism,* we shall then know the existing distribution of economic energy to the several destinations listed. In this task attention will first be turned to the question of wages.

Wages.—Statistics as to wages are voluminous; and to the degree requisite for our present purpose, which is comparative only, they are consistent and reliable. There is no need to insert here a treatise upon wages. All that is desired is knowledge as to their general trend with the passage of the decades. The following sources of data have been relied upon:

U. S. Bureau of Labor Statistics, Bulletin 88—original data by Dr. Kuczynski, from 4034 wage-paying establishments;
Bowley, in the *Economic Journal* for December, 1898;
Bowley, in the *Journal of the Statistical Society,* 1899;
Neuhaus, in the Zeitschr. d. königl. preus. Statistische Bureau, 1903;
Massachusets State Census, reporting for 1904;
Wood, *Journal Statistical Society,* 1910;
Dewey, Twelfth Census, Special Report on Employees and Wages;
Clement Colson, formerly French Director of Railways, translated from the *Revue Politique* for Aug. 10, 1913, by the Bureau of Railway Economics, Washington, and quoted in the *Railway-Age Gazette* for Nov. 14, 1913.

The data from these various sources have been brought to a common standard of 100 for the year 1910 and then plotted upon the same sheet, and thus averaged graphically. This results finally in Fig. 2, which is derived as follows:

For the earlier decades the information naturally comes chiefly from Europe; but the figures for the last few decades, which are relatively complete and accurate for both continents, show that the general trend of wages is closely the same upon the two shores of the Atlantic. Thus a tabulation of wages from 1890 to 1907, based upon 100 for the latter year, shows the parallel variations in Europe and America set forth in Table 33.

TABLE 33

WAGES IN EUROPE AND AMERICA, 1890 TO 1907

Year	United States	Europe		Year	United States	Europe	
		Germany (Kuczynski)	France (Colson)			Germany (Kuczynski)	France (Colson)
1890	82.5	....	73.1	1899	81.6	82.7	88.5
1891	82.4	....	73.3	1900	84.0	85.6	86.7
1892	82.8	....	68.1	1901	85.4	84.4	83.4
1893	82.7	....	69.1	1902	88.1	81.8	82.8
1894	79.8	....	68.1	1903	90.6	83.4	85.9
1895	80.4	....	73.3	1904	90.5	86.2	88.2
1896	81.3	....	69.5	1905	91.9	88.7	91.8
1897	81.6	....	78.2	1906	95.5	96.0	95.1
1898	80.5	80.7	84.0	1907	100	100	100

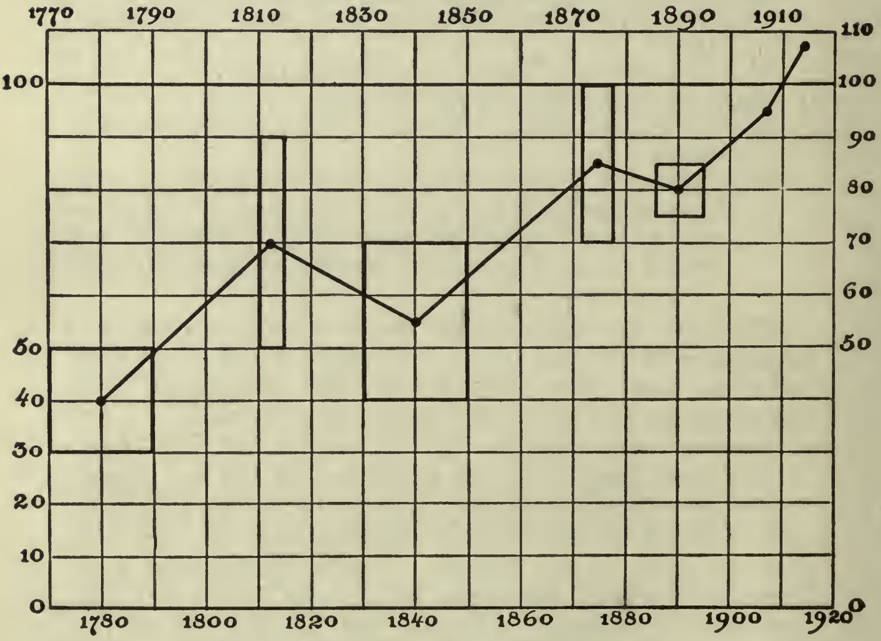

FIG. 2. GENERAL TREND OF WAGES.

The General Trend of Wages.—The consensus of all the above-mentioned sources of information, when brought into a common field of comparison, such as Fig. 2, amounts to the establishment of several fairly definite periods of maxima and minima of wages. The range of these maxima and minima is shown graphically by the rectangles of Fig. 2. They may also be stated in numbers, in terms of a standard of 100 for the year 1910, as in Table 34.

TABLE 34

MAXIMA AND MINIMA OF WAGES, 1770 TO 1914 (1910 = 100)

Period		Wage
1770–1790	Minimum	30– 50
1810–1815	Maximum	50– 90
1830–1850	Minimum	40– 70
1872–1878	Maximum	70–100
1886–1895	Minimum	75– 85
1907	Rising	95
1914	Still rising, but more rapidly	107

The showing of this table, in its broadest aspect, is a general rise of wages from the beginning of statistical information, in the latter part of the eighteenth century, to the present time. This general rise has been interrupted only by occasional and moderate relapses, such as that from about 1812 to 1840, and again from about 1875 to 1890; but the latter of these was more a mere arrest of the rise than a real lapse of wages.

These data are exhibited more clearly in Fig. 2. This figure displays as rectangles the general limits of range of wages, over certain periods which may be taken as characterized by the maximum or minimum in question. From center to center of these rectangles are drawn straight lines which may be assumed, as fairly as any other, to indicate the general trend of wages during the interims between maxima and minima.

While Fig. 2 corroborates, by the general trend of these straight lines, what has just been said as to a fairly continuous rise in wages during the last 125 years, yet the rectangles show that in certain instances wages reached a temporary maximum about a century ago, from 1810 to 1815, which was never again attained until shortly before the present century opened. Wood, in debating wages for cotton-workers from 1833 to 1906, remarks that the former year was about a minimum for the century, wages in 1806 being about as high as in 1906.

But such statements as these do not apply widely enough to negative the broadest possible characterization of the general trend of wages as a rise from 1770 to the present hour. And in so far as the temporary maximum of 1805-1820 departs from this general trend it corroborates what will be said later as to the forces guiding the rate of wages.

Wage-coefficients.—The series of straight lines shown in Fig. 2 gives wage-coefficients for the decades concerned in Tables 27 to 31, in terms of 100 for the year 1910. These coefficients are given in Table 35.

TABLE 35

WAGE-COEFFICIENTS, 1850 TO 1914

1850	63	1880	83	1905	93
1860	72	1890	80	1910	100
1870	80	1900	89	1914	107

It is fully recognized that the purchasing-power of these rising wages has simultaneously diminished, in many important respects; but this has nothing to do with the present task, which is only to compare *relative* aggregate productive and commercial energies. For these energies are all expressed by the two classes, or by any sub-class, *by purchase in the same open market.* Therefore we need compare now only dollars, not purchasing-powers. The latter will be considered in later chapters.

Wages in Manufacturing.—Another fractional source of information as to variation in wages is found in the United States census-reports as to manufactures. This source is complete in range of time over the sixty years, but is incomplete in that it applies only to labor employed in manufacturing establishments. It is to be expected that such labor must grade more highly, in average, than that for industry in general, which must include large portions of unskilled labor. This difference might be expected to become magnified, as technical art progressed with the passage of the decades.

Another source of information is found in the statistics as to railroads furnished by the roads themselves, under oath, to the Interstate Commerce Commission.

These several sources permit the tabulation of mean wages appearing in Table 36. Remembering that the column for "General World Data" itself represents an averaging, or "composite photograph," of several sources of information, it will be clear that our knowledge as to the relative progress of wages during the last sixty years is fairly consistent and accurate.

TABLE 36

WAGES, AVERAGE PER ANNUM, 1850 TO 1914

Year	Manufacturing Establishments in United States	American Railroads	General World Data, Value for 1910 Assumed as $550	Average of Columns 2 and 4	Coefficient, 1910 = 100
1850	$248	....	$347	$297.50	56
1860	289	....	396	342.50	64
1870	302	....	440	371	69½
1880	347	....	456	401.50	75
1890	444	$558	440	442	83
1896	....	544	....	....	....
1900	437	547	490	461	86
1900	426				
1904	....	610	....	....	....
1905	477	....	512	495	93
1906	....	571	....	....	....
1910	518	650	550	534	100
1914	....	784	588	....	....

Spahr on Wages.—Dr. Charles B. Spahr, who has devoted an entire volume, "The Present Distribution of Wealth" (1896), to an exhaustive study of this problem, reaches the following estimates for the year 1890 stated in Table 37. He says:

> "The average family income from labor should not be put higher than $500 in the towns and $300 in the rural districts. . . . One per cent of our families receive nearly one-quarter of the national income, while fifty per cent receive barely one-fifth."

From this fact it becomes obvious what the editors must do in order to make effective their frequent advice to the people to flock "back to the land." If they will but contribute $200 per annum to each person on whom the advice is urged they will then have just come out to an even pecuniary inducement between city and country; and the advice may then turn the scale in favor of the country!

TABLE 37

WAGES IN 1890—DR. SPAHR

Agriculture (including house rent)	$ 306
Mines	371
Manufacturing and Mechanical Trades	360
Railroads	650
Others in Trade and Transportation	548
Teachers	250
Ministers	900
Physicians and Lawyers	1200
Other professions	800
Servants and Laborers (not including lodging)	200
All others	400

Salaries.—When one turns from wages to salaries the data available are more at variance, owing to the wide divergence of class of labor coming under the title "salaried," and the data are to be had only for recent decades. The United States census of manufactures gives data as to salaries of "clerks and officials" dating from 1890; and from 1905 on its differentiates between the salaried employees and the salaried proprietors, firm-members or officials of corporations. The railroad-statistics of the Interstate Commerce Commission give full data as to salaries since 1896, and lumped information for 1890. Information from all these sources is collected in Table 38.

Table 38 reveals a number of significant surprises. First, the railroad-statistics, which are the most direct and authentic of any in their origin, show an average salary for "general officers" ranging from a minimum of $2326 in 1896 to a maximum of $3720 in 1914. These figures are very hard to believe. It is common knowledge that there are many railroad-officers whose salaries, like Mr. Mellen's, range nearer to $100,000 than to $10,000. Even the average vice-president or treasurer must get upwards of the lower figure.

TABLE 38

SALARIES, PER ANNUM, 1890 TO 1914

Year	Railroads			Manufacturing Establishments			
				Actual Salaries Reported		Computed Salaries	
	General officers	Other Officers	Office Clerks and Station Agents	Officers, Proprietors and Firm Members	Salaried Employes	Proprietors and Firm Members: Found by deducting from the apparent profits the percentages on capital stated	
						6%	10%
1890	$2632	....	$1512				
1896	2326	$1950	1555				
1900	2688	1743	1532	.....	$1046		
1905	2508*	1966*	1427*	$628	1107	$3965	$1720
1910	3278	2078	1332	808	1187	4070	1372
1914	3720	2174	1177				

* Estimated from data as to 1904 and 1906.

If this be so, what must be the number of officials who are receiving considerably less than $2500 or $3000, if these averages be true! It is plain that many very small roads must figure in the averages co-equally with the larger systems.

Secondly, "office-clerks and station-agents" for railroads have experienced a steady decrease of salary since 1890. Since this is directly inconsistent with an overwhelming mass of testimony to the effect that the wage-rate for each given grade of labor has been steadily rising since 1890, these figures force the conclusion that the relative grade of labor going into this class of occupation has steadily deteriorated during the last quarter-century.

Also, without entering at all the comparative merits of the contest now waging between the four unions of railroad-workers, on the one hand, and the railway-corporations on the other, it is proper to point out that the pay of the unorganized portion of the railway-servants has gone steadily down while the average of all wages was rising. To those who do not believe in trades-unions or strikes, the policy of the railroads towards their non-unionized employees is not encouraging.

The very small figures appearing for the "officers, proprietors and firm-members" of manufactories is not equally surprising, because these data include many very small factories the officers or proprietors of which often receive no salaries at all, taking their winnings in the form of dividends upon stock, if a corporation, or of divided profits if a firm.

The variation in "computed salaries" is a manifestation of the generally recognized policy, of late years, of cutting down the visible salaries and substituting rewards coming through the capitalization instead. From 1850 to about 1890 the computed salaries rose pretty steadily. After that, in addition to the conscious policy just mentioned, arose the unconscious acceleration in number of small, new establishments, due to the acceleration of invention of new appliances. Both forces tended toward the reduction of actual, averaged salaries. Further light as to these questions, so far as they relate to manufactures, will be found in Table 61.

General Trend of Wages and Salaries.—The general significance of the figures of these recent tables as to wages and salaries is best comprehended at a glance by reference to Table 39, which states them all in parallel in the form of coefficients based upon the figure 100 for the year 1910. From the figures presented in Table 39, and particularly from the two columns of "assumed coefficients" for wages and salaries respectively (which are merely round-number estimates of a fair statement of the relative rise in wages and salaries during the sixty years) we are now for the first time in a position to measure approximately the comparative energies of the productive and commercially combative portions of the population respectively, as classified in Tables 27 and 28—so far as they find expression in either wages or salaries.

There can be no hesitancy in undertaking whatever estimate of this sort may be available from Table 39, on the score that its accuracy is not beyond question. Not only does Table 39 show that, for purposes of relative measurement of progress, the evidence from various sources is gratifyingly consistent. But more than that, the estimate *must* be made. Too much

TABLE 39

WAGE AND SALARY COEFFICIENTS, 1850 TO 1914 (1910=100)

Year	Wages				Salaries				Assumed Coefficients	
	General Data, Both Continents	U. S. Census of Manufactories	American Railroads, Interstate Commerce Commission	From Table 36	Clerks and Officials of Manufactories	General Officers of American Railroads	"Other Officers" of Railroads	Railway Officers, Clerks and Station Agents	Wages	Salaries
1850	63	46.5	....	56	....	....	....	....	55	40
1860	72	54.3	....	64	....	....	....	....	65	48
1870	80	56.7	....	69	....	....	....	....	70	55
1880	83	65.2	....	75	....	....	....	....	75	63
1890	80	83.6	85.8	83	71.0	(78.0)	(90)	113.5	82½	71
1896	....	....	83.7	..	....	71.0	93.9	116.7	....	....
1900	89	82.2	84.2	86	85.5	82.0	83.9	115.0	85	84
1905	93	92.1	(90)	93	(92.8)	....	(94.7)	(107.2)	92½	92
1910	100	100	100	100	100	100	100	100	100	100
1914	107	....	120.6	....	....	113.5	104.7	88.4	112½	115

(Values in parentheses estimated from approximate data.)

depends upon its showing for it to be longer postponed. *Predictions as to the future destiny of our land—whether it is to enjoy peaceful, gradual growth or is to burst forth in violent anarchy of revolution—hang upon the result.* Fundamental policies of business and government will appear wise or foolish according to its complexion: black or white.

It is upon such compilations as Tables 27, 28, 29 and 39, with others depending thereon, that such important federal measures as the so-called Sherman anti-trust law, for instance, or that looking toward federal incorporation, with dozens of others, must be classed as the wisest legislation by far-seeing statesmen, or the veriest nonsense and mischief—according to whether these statistics show the country to be advancing in one direction or the exact opposite, in its national economic tendencies. In all such work minutiæ must be discarded. The main truth is the thing.

Relative Earning-Capacities.—Reviewing all these recent tables together, it is plain that we possess fairly accurate data as to the relative progress of wage-rates—for the largest two among all the branches of industry, namely railroading and manufacturing, at least; and thus a major portion of the problem is overcome. For the other branches there will be adopted here the following method of estimate as to recent incomes in the several classes of occupation listed in the tables. However arbitrary this method may seem, it will be found to represent a maximum of probability of truth, drawn from all the indirect sources of information listed above. Thus:

For (*a*) Agriculture and Food-supply, (*b*) Textile and Clothing, (*g*) Domestic, (*h*) Miscellaneous, part of (*k*) Hucksters, Pedlars and Porters, part of (*l*) Book-keepers, Clerks, Salesmen and Stenographers, and (*m*) Divertive, except Actors and Artists—for all of these the estimates of aggregate income for the entire subclass will be based upon the next to the last column of Table 36, virtually agreeing with the next to the last column of Table 39.

For (*c*) Mechanical, and all of (*l*) Munitions, except Bookkeepers, etc., Lawyers and Messengers: the second column of Table 36.

For (*d*) Transportation and Communication: the third column of Table 36, carried back into the earlier decades by means of the next to the last column of Table 39.

For part of (*e*) Clergymen: $750 for 1910, and a scale of change as shown by the second column of Table 39.

For the rest of (*e*) Dentists and Physicians, and part of (*f*) Architects, Engineers and Journalists: $2000 for 1910, and the same scale of change.

For the rest of (*f*) Librarians, Teachers, Professors, etc., part of (*k*) Merchants, and part of (*m*) Actors and Artists: $1000 for 1910, and the same scale.

For part of (*l*) Messengers: $250 for 1910, and the same scale.

For part of (*l*) Lawyers: $2500 for 1910, and the last column of Table 39 for scale of change.

For part of (*j*) Agents and Commercial Travelers: $1000 for 1910, and the third column of Table 39 as to scale.

For part of (*j*) Bankers, Brokers and Officials of Banks and Companies: $3000 for 1910 and the last column of Table 39 for scale.

For part of (*j*) Manufacturers and Officials: $2000 for 1910 and the same scale of change.

For *x*, which consists largely of women and minors: $300 for 1910, with the second column of Table 39 for scale of change.

While there is room for endless debate as to the exact justice of the details of any such a schedule as the above, yet it is believed that these wages, salaries and scales of advance will appeal to the reader as being fairly and conservatively founded upon our best knowledge as to the historical facts. Certainly no fault can be found on the score of exaggeration of commercial incomes beyond their truth, either as to the figures for 1910 or as to the rate of increase during recent decades.

Relative Productive and Commercial Stipends.—It is the application of the above schedule to the data of Tables 27, 28 and 29 which results in Tables 40 and 41.

At the foot of Table 41 appears a statement of the money in circulation in the United States, per capita, and below it a line of ratios between the aggregate of all salaries and wages, also stated per capita, and this circulation at the same date. *The fair constancy of this ratio over a period of sixty years, during which time nearly everything else varied widely, is significant; but the fact that money is gradually ceasing to be our circulating medium is nevertheless plainly visible.*

TABLE

AGGREGATE WAGES AND

(Dollars paid by the Ultimate Consumer, per annum

	1850
Productive:	
(*a*) Agriculture and Food-supply	$45.08
(*b*) Textile and Clothing	4.41
(*c*) Mechanical	6.35
(*d*) Transportation and Communication	2.73
(*e*) Clergymen, Physicians, Dentists, etc	2.93
(*f*) Architects, Engineers, Journalists, Teachers, Professors, Librarians, etc	1.08
(*g*) Domestic	9.30
(*h*) Miscellaneous	11.78
(*x*) Unrecorded as "Occupied" in the Earlier Decades	27.02
Total "Productive"	$110.68
Commercially Combative:	
(*j*) Agents, Bankers, Brokers, Commercial Travelers and Officials of Banks and Companies	$0.41
(*k*) Hucksters, Merchants, Pedlars and Porters in stores	4.91
(*l*) Bookkeepers, Clerks, Salesmen and Saleswomen, Stenographers, Lawyers and Messengers, etc	2.71
(*m*) Actors, Artists, etc	0.84
Total "Commercially Combative"	$8.87
Grand Total	$119.55
Addendum: $a+b+x$ [1]	$76.51

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[1] See Tables

In the earlier decades money, we know, was so scarce as to inconvenience the individual in his daily transactions, to a degree hard now for us to realize. Even in the North there was no approach to a competent supply of currency until the 'seventies, while in the South immediatly after the Civil War currency was completely lacking, forcing all trading to be done by barter. Money came creeping in only gradually as the years passed thereafter.

Yet in those days there was actually a larger proportion of

40

SALARIES, 1850 TO 1910

per capita, for the various services specified)

1860	1870	1880	1890	1900	1910
$53.94	$60.56	$65.54	$68.06	$65.91	$77.47
7.28	7.59	9.05	11.28	11.76	14.41
8.42	9.86	11.53	18.60	18.81	27.80
3.77	5.56	6.45	10.33	11.65	23.33
3.45	3.65	4.13	4.13	5.03	5.61
3.04	3.34	5.18	6.68	9.07	13.85
11.05	9.99	9.57	11.18	10.04	12.30
16.76	14.53	20.19	15.66	23.65	16.69
25.52	26.55	22.06	17.73	14.00	6.00
$133.23	$141.61	$153.69	$163.65	$169.92	$197.47
$1.07	$1.29	$2.12	$4.00	$8.46	$12.90
6.48	8.08	8.68	9.53	10.52	12.20
4.04	5.61	8.13	12.69	16.56	26.15
1.61	2.60	3.98	6.49	8.04	12.05
$13.21	$17.58	$22.91	$32.70	$43.60	$63.30
$146.44	$159.19	$176.60	$196.35	$213.52	$260.77
$86.74	$94.70	$96.65	$97.07	$91.67	$97.88

31 and 32.

currency to dealings than now. The explanation of this remarkable statement lies in the great and increasing degree to which we now rely upon bank-checks and notes for ordinary payments, and upon stocks, bonds, etc., as collateral for other sorts of transfers of wealth.

The Basic Economic Contrast.—In review of Table 40 it may be pointed out that whereas any statement of wages or salaries paid in money gives no clue to the role which the altering value of gold, or alterations in money-standard due to any

TABLE 41

PERCENTAGES OF TOTAL

	1850	1860	1870	1880	1890	1900	1910
Productive to Total..	92.6	91.0	89.0	87.0	83.3	79.5	75.7
Rate of Growth...	100	98	96	94	90	86	82
Combative to Total..	7.4	9.0	11.0	13.0	16.7	20.5	24.3
Rate of Growth...	100	121	148	175	225	276	328
(*o*) Arts, Crafts and Sciences......	$15.49	$24.24	$28.22	$34.93	$51.12	$58.82	$88.11
Per cent of Total.	13	16.5	17.7	19.8	26.0	27.5	33.8
Rate of Growth..	100	128	137	153	201	213	261
(*p*) "Truly Combative".........	$7.20	$11.68	$15.96	$21.00	$32.97	$42.37	$67.13
Per cent of Total.	6.0	8.0	10.0	11.9	16.8	19.8	25.7
Rate of Growth..	100	132	167	197	279	329	427
Money in Circulation.	$12.02	$13.85	$17.51	$19.41	$22.82	$26.93	$34.33
Ratio: "Grand Total" of Table 40 to Money in Circulation..	9.96	10.56	9.09	9.10	8.60	7.93	7.58

other cause, may play in the expansion of the figures as the decades pass, yet all these uncertain factors are eliminated when one turns to the "percentages of total," and the rates of growth of these percentages, which appear in Table 41. Whatever may have been the fluctuation in gold production or cost, or however artificial may be our present scale of prices and cost of living, these percentages and rates show accurately the *relative proportions of human energy* which are being devoted by each of us, as we pass our money across the shop-counter, to these two contrasted destinations respectively:

First, to the useful, productive effort which alone creates and supplies us with all things bought and consumed, including the transportation requisite for delivering them at our doors; and

Secondly, to the combative effort which struggles over the ownership of a part of our money, including the money thus acquired and that wasted in the contest—the figures in both cases applying *only to the factors of wages and salaries.*

Dilution of the Ultimate Consumer's Purchasing-Power.—Thus our dollars, in being increasingly forced into paying the commercial fighter for fighting, have left a smaller and smaller percentage with which to buy that life-support which we think that we are buying when we pass them across the shop-counters. In other words, commercialism, spreading its effects across the land in a perfection of fluid equilibrium, *acts to dilute the purchasing-power of every dollar spent.*

Throughout the sixty-odd years reviewed statistically this dilution of the Ultimate Consumer's every dollar has been proceeding cumulatively. As both invention and growth of population have afforded additional opportunity, commercialism has imposed its swelling combat-tax upon the purchasing-power latent within each dollar, quite as water is added to the proverbial church-lemonade.

It is not worth while, at present, to trace this dilution through our tables of statistics, because the important factor of interest and dividends yet remains to be included. Yet for the curious it may be pointed out that the first line of Table 41 gives the value (in cents) of actual purchasing-power latent within each dollar, if we assume that the dollar has been diluted *only by waste in the form of wages and salaries paid to those who have been "fighting on the job,"* instead of attending to the interests of the Ultimate Consumer. Thus we have not yet measured all the water in the lemonade.

Conclusions must be deferred until all of the diluent factors have been introduced statistically. In passing to the next of these—interest and dividends—it need only be remarked that, so far as is shown by the element of wages and salaries, as had been already surmised from mere numbers of people, *there is no institution in our civilization which is growing at a rate anything like that exhibited by commercialism.* Further, so far as rates of pay may be taken as an indicator of personal ability, commercialism is growing as rapidly in the way of attracting to its ranks the more capable, as much as it is in the way of mere numbers enrolled.

CHAPTER XVII

WEALTH, INTEREST AND AGGREGATE COMMERCIALISM

THE salaries and the wages of the economic combatants, however, do not alone measure the transfer of economic energy from man to man in monetary form, nor its dissipation by its diversion into non-productive channels. Enormous amounts of such energy are constantly being diverted away from the true path between Ultimate Consumer and producer in the form of rent, interest, dividends, profits and surplus; and these payments upon capitalism, while not the controlling factor in the growing social crisis, are yet larger in amount than the factor which does control, namely, contributory costs of competition.

Such payments permit the purchase of life-support by their recipients regardless of any equal quantity of produce as a prerequisite, and lead to its consumption without a corresponding development within the social organism of any equivalent productive effort. Such payments, as well as the acts of the combatants, are constantly diverting life-support from its true cyclical swing between production and consumption and back, and are dissipating it into the abysses of space. Hence they are also diluting the purchasing-power of every dollar in the land.

In our efforts at a statistical analysis of the growth of commercialism, we must abandon instantly any hope of including any accurate data as to two out of the five sorts of such payment listed above, namely, profits and surplus. It is a fact ever to be remembered, to the credit of the conservativeness of the conclusions reached in this book, that all of those huge sums currently abstracted from the Ultimate Consumer in the form of *net profits and reinvested surplus* have been unavoidably neglected in our statistical tables. We cannot include them. We are forced to rest content with statistical estimates of the current volumes of rent and interest only, with whatever portion of what are called dividends which falls properly under these heads.

Wealth in America.—Even when confining ourselves to the task of estimating the passive interest-bearing wealth of this country, we find it difficult. The results must be accepted as approximate only. Thus Watkins says:

> "In the United States we have no such means for measuring capital as in England."

Then, too, many forms of wealth which actually bear interest, nominally do not do so. But so far as the Ultimate Consumer, the payer of all interest, is concerned, they virtually all do so.

Thus a corporation owning its own site neither pays interest on it bodily to another person, in the form of rent, nor pays it technically to itself, as a rule. Yet its ownership of the site, and the valuation of this site in possible exchange for other sorts of property, permits the corporation, in public opinion and the law, to charge enough for its commodities or service so that a margin is left, large enough to cover, among other things, the interest upon this valuation of site. Selling-prices which fell short of permitting such payments or allowances would be deemed, by the commercial public opinion of the day, to be confiscatory of the corporation's property.

The Ultimate Consumer Pays Interest upon All Forms of Property.—Thus what is in reality interest upon site, contributed by the Ultimate Consumer in the price paid across the shop-counter, may reach its ultimate destination in the form of a dividend upon stock, or interest upon a bond, or as an exaggerated salary to some officer of the corporation, or as a stock-dividend distributed by a "melon-cutting." In either of the forms cited the payment made by the Consumer to the owner of the site is just as much true interest upon the valuation of the site, and properly to be called rent, as if the stock or bond holder, or the official of the corporation, had actually owned the site, while the corporation, acting as the agent of the Consumer, had rented it from him.

In this way all property capable of commercial valuation bears interest. The sole exception is property the title to which rests in the hands of all the people making use of it, and against which are issued no interest-bearing securities owned by individuals. Thus much governmental property—that portion represented by issues of bonds, certificates, etc.—bears interest, paid by the Consumer, not to the government but to the individual holding the bonds or certificates. But gold and silver in the Treasury and not subject to issue of currency bears no interest; and a relatively small fund of United States notes, some $375,000,000, is also kept from doing so by special legislation. Otherwise all property capable of commercial valuation bears interest, against the interests of the Consumer.

The Interest-Rate.—Not only is the aggregate amount of all interest-bearing property now in question, but also its rate of interest. If it were necessary to deal with the vast mass of statistics as to the varying rates of interest upon divers sorts of property during the last sixty years, the task would be a hopelessly burdensome one. But there is no evidence that the real rate of interest has ever varied appreciably.

Just what is this real rate of interest would also be a difficult question to answer. Yet even this does not concern us vitally here. For it must be remembered that what passes in business-land as the market-rate of interest is in reality made up of three different elements. These three are:

> First, true interest, which is a rate paid only for the use of a *principal which is assured of return,* to an *idle owner* of mere legal title thereto:
>
> Secondly, an insurance of the principal against the risk of its non-return, owing to commercial disaster; and
>
> Thirdly, salary due to the active commercial combatant who is most commonly indentified with commercial loans.

Of these three the first, according to all the principles of fluid equilibrium which apply so obviously to the world of valuations, *must be the same for all sorts of commercial property and, except for local or temporary disturbances, the same for all times and places.* It is the other two elements which vary constantly and widely from enterprise to enterprise, even in the same place and time, and which explain the wide fluctuations in the commercial or market rate of nominal interest.

Thus in new or isolated communities where commercialism is active, as in a mining-camp (as contrasted with such places as remote fishing-villages, where commercialism and interest are alike unknown), or in temporary conditions of the money-market in the great cities, the interest-rate runs unusually high. But as soon as the mining-camp aspect of the new settlement has worn off, or the flurry in stocks is over, the interest-rate soon falls into equilibrium with that normal in the larger commercial centers, with which the world maintains constant exchange of commodities and money.

Thus at all times during the sixty years here under analysis there have been extant some securities which apparently "earned" rates varying anywhere from zero to twenty or more per cent upon their nominal or face value. But, except for considerations of risk or labor just excluded from true interest, there have been no such variations in rate based upon their market-valuation.

The market-valuation of all paper securities, just as of all other commercial property, varies to meet, and is determined by, its earning-power—not its earning-power or interest-rate to meet its true value. This is the principle so ably set forth by Professor Fisher. It applies to paper securities equally with the orchard used by Fisher in illustration. Even bonds, the steadiest of all forms of security, regularly have their market-valuation computed away from their face-value, in order to modify their declared and fixed rate of interest into coincidence with the varying market-rate of interest.

The Volume of Commercial Property.—Securities are constantly being issued in a volume in excess of the ability of the public to "digest" or "absorb" (or in reality, to pay interest upon) them. This is the fundament of all commercial policy.

In the beginning this policy was known only to the bankers alone. Early in the administration of our railroads, soon after the policy of state-enterprise had resulted in failure, this policy was appreciated and adopted; and hence these properties with the mining-enterprises, have always been familiar objects of financial speculation. For mining properties have always been inevitably so permeated with the gambling spirit that there was scarcely a time when they were not the subjects of active speculation.

But it was a comparatively recent and marked event in the history of finance when "the industrials," representing the larger manufacturing enterprises, appeared upon 'Change. Since that entrance almost every conceivable sort of commercial venture has contributed its quota of paper securities to the mass being constantly tossed back and forth upon the tempestuous sea of the speculative exchanges.

It was the marked success of the railroads and mines as instruments for the accumulation of paper wealth during the period which extended forward from 1864, broken only by the panic of 1873 and the lesser reaction in each of the next two decades, which created among the wealthy a demand for "opportunities for investment" so urgent as to force the industrials, enterprise by enterprise, into the financial field. This policy has prospered and expanded until now this opportunity for investment,—originally defended upon the ground that if the capitalists had not invested, in response to the (unrecorded) demand of the people that they should do so, no expansion of facilities would have been possible—is now claimed as if it were an inherent right of man. There is no finer instance of the way in which modern capitalism consists in re-invested dividends than this gradual spread of commercialism over the productive system of the land, as fire creeps over prairie-grass.

But our present concern is merely to attain an estimate of the aggregate accumulation of commercial property, and of a flat interest-rate thereon which may be reasonably assumed to represent the average commercial rate; that is to say, true interest, plus insurance against loss, plus reward for current effort in promotion. From the usual rate upon United States Government bonds, which are ordinarily owned by those primarily desirous of security from doubt as to the permanence of the principal-value, and disliking active commercial exertion, the true rate of pure interest may be taken as lying between three and four per cent.

But because a proper estimate of commercialistic transfer of energy through interest-payments must take just as much cognizance of the cost to the public of the risks constantly being incurred in commercial warfare, as well as that due to mere pressure created by passive ownership, we must accept the average gross interest-rate as we find it. Even where it represents risks rather than true interest, *we have no other statistical measure of the cost of these risks to the public than the gross interest-rate.*

Therefore no space will be wasted here in a fruitless debate of the mass of detailed data bearing upon the question of what is a fair average of interest and dividend rates, which in practice vary all the way from zero to forty per cent. Six per cent is a standard commonly accepted on both sides of the Atlantic as a "reasonable" rate—although the strenuous efforts of our own Interstate Commerce Commission at finding anything reasonable at all, on which to base a standard rate, have failed. This is a figure toward which the commercial world usually adjusts itself, up or down, as best it may.

But this rate represents merely a popular tradition, rather than anything natural. It has been found by the commercialists to be better to adjust the current volume of issue of securities *so that the mean net rate will fall near to what the public is accustomed to regard as right,* than it is to flout public superstition unnecessarily by crowding the rate in either direction.

The Aggregate Interest-Burden upon the Ultimate Consumer.—But it must never be forgotten that the real rate of interest, so far as the aggregate burden upon the Ultimate Consumer is concerned, is measured both by the *volume* of securities outstanding, and by their *market-valuation,* as much as it is by the nominal or apparent rate of interest. It is the product of volume-times-valuation-times-apparent-rate which is alone of importance to the Ultimate Consumer.

The law of equilibrium which determines, from moment to moment, these three current factors in daily business-life consists, first, of a balance of this gross product, or aggregate burden of interest, against the resistant life of the Ultimate Consumers, to determine "the maximum (interest-charge) which the traffic will bear." This aggregate is therefore capable of, and obviously is, growing upon us as we learn to endure.

Secondly, in obedience merely to the aforesaid popular tradition or superstition in favor of six per cent, as a "reasonable" figure for the interest-rate, the volume of securities outstanding is then so adjusted up or down, from time to time, by expansion or contraction, or by accelerating or retarding the rate of issue—all subconsciously, of course—so that *neither will the investing public become alarmed by an apparent rate of interest too far below this traditionally proper six per cent, nor will the consuming public become unnecessarily indignant at a rate too far above this sacred figure.*

For there is absolutely no reason other than this why the apparent rate should not be two, twelve or twenty per cent, as well as six. The commercial world could easily adjust its rate of issue of securities to make the rate either of these figures. *Its aggregate profits would be the same in either case. So would be the total burden upon the public.*

The modern world of "practical" businessmen is ruled just as blindly by an unreasoning, superstitious faith in the sacred reasonableness of "six per cent per annum" as any past worshipers of any self-made idol have ever been. Therefore we also may accept the figure of six per cent as a "reasonable" rate. It is exactly as reasonable, and no more so, than any other. But the people will be less likely to find fault with that rate than any other, and the purpose in hand is such that no appreciable error will have entered our final conclusions, even had five or seven per cent been a figure better fitting the valuations of principal stated statistically.

Statistical Data.—About the only source of information as to the history of the growth of aggregate fixed wealth in the United States, as contrasted with the current production of wealth, is to be found in the census-statistics. These have been digested and reported in a compact form, useful to the busy man, in the "Statistical Abstract," published annually by the Government. These data cover real estate and the improvements upon it, farms and farm-implements, manufacturing-machinery and tools, and the railroads (steam and electric), canals, waterworks, electric-light and power stations, telegraph and telephone, etc. Also bank-loans and surplus, savings-bank deposits and public debt—federal, state, county and municipal.

The census-reports do not give separate information as to the volume of paper securities issued against all this "personal" property, as the census styles it. As to this only indirect light may be had, chiefly from the reports of the New York *Journal of Commerce* as to the current annual listings of stocks, bonds and short-term notes on the New York Stock Exchange, which reports are continuous since 1885.

But this, of course, is only a partial revelation of the volume of such securities constantly undergoing speculative exchange, even in New York City alone. Since the census-reports as to aggregate wealth, which are the most reliable data and the only ones dating back to 1850, include these securities, in a way, as a measure of the commercial valuation of what it lists under the

TABLE 42

AGGREGATE WEALTH PER CAPITA, 1850 TO 1920*

	1850	1860	1870	1880	1890	1900	1910	1915	1920
Statistical Abstract of U. S. Census	$308	$514	$624	$870	$1036	$1165	$1803	($2125)	($2460)
Separate Estimates									
Real Property and Improvements	....	....	....	440	628	688	1070	(1130)	(1200)
Farm-implements and Live Stock	....	....	....	48	43	53	73	(84)	(95)
Manufacturing Machinery and Tools	....	....	....	(10)	(20)	33	59	(74)	(90)
Railroads, Canals, Electric Stations, Telegraph and Telephone	....	....	....	12	15	17	26	(32)	(38)
New York Stock Exchange Securities	....	....	....	(144)	209	355	537	621	(705)
National Bank Loans and Surplus	....	....	22	23	35	40	68	76	(87)
Savings Bank and Trust Company Deposits	3	5	14	18	30	45	78	91	(112)
Public Debt: Federal, State, County and Municipal	(3)	(2)	63	41	36	45	58	(66)	(73)
Total	....	....	....	(736)	1016	1276	1969	(2174)	(2400)
Per Cent Variation from U. S. Census data	....	....	....	−15	−2	10	8	2	−2
U. S. Census Totals less Real, Farm and Public Debt	....	....	....	341	329	379	602	845	1092
Public Debt: Per Cent of U. S. Census Total	....	....	....	4.7	3.5	3.9	3.3	3.1	3.0

*Values in parentheses estimated. Estimates made previously to war-financing.

guise of tangible property, it is not of primary importance that any separate estimate of securities be made. But as a check upon the other figures, and for a general illumination of the situation, such an estimate is worth while, and is therefore included in Table 42.

In Table 42 the figures in parenthesis represent estimates from more or less approximate data. The figures for 1915 are partly data of actual record and partly estimates formed by continuing the curves drawn from the data for previous decades. For 1920, of course, all the figures are estimates of this nature.

TABLE 43

RELATIVE RATES OF GROWTH, ALL QUANTITIES PER CAPITA

	1880	1890	1900	1910	1915	1920
A. 1880 = 100						
U. S. Census Total	100	119	134	207	238	283
Ditto, less Real, Farm and Public Debt	100	96	111	176	248	320
N. Y. Stock Exchange Securities	100	145	246	373	431	490
B. 1890 = 100						
U. S. Census Total	...	100	112	174	205	237
Ditto, less Real, Farm and Public Debt	...	100	115	183	257	332
N. Y. Stock Exchange Securities	...	100	170	257	297	337

The sole purpose of that portion of Table 42 lying below its first line is to gain some idea of the relative proportions of the parts making up the total wealth, and in particular that of paper securities, and to achieve some sort of check upon the accuracy of the first line from independent sources of information. It will be noticed that these "separate estimates," which are based partly upon data taken from other portions of the census-reports and are partly independent, check with the United States census aggregate within 15 per cent for 1880, the earliest decade attempted, and within from two to ten per cent for the later decades.

The purpose of Table 43 is merely to present clearly *the relative rates of growth* of the three different measures of aggregate commercial wealth respectively. Whatever the method of measurement, the volume of paper securities is seen to be constantly surpassing the volume of valuation of property, even in its commercial sense. It is particularly to be noted that all of these figures are displayed from a per-capita basis.

In all of the tables which include values for 1920, these last, of course, are estimates or extrapolations from the data available up to 1915. Further, these estimates were made without any attempt to include that enormous expansion in our burden of interest-bearing securities due to the financing of the Great War. They give merely what would probably have been our burden of commercialism if the war had not occurred.

The Soul of the Body Economic: Table 44.—Basing our figures upon the first line of Table 42 and relying upon the flat interest-rate of six per cent, a combination of Tables 39 and 40 gives a final and complete view of *the relative proportions of the Ultimate Consumer's money and economic energy which go respectively to supporting his life and to economic dissipation in commercial combat or leakage.* The result is displayed in Table 44, in which all quantities are measured in dollars per capita of total population per annum.

Net Efficiency of Economic Organization.—The central lines of Table 44, with their translation into Table 45, form the goal, the central nucleus, the pivotal point of this entire work, in its statistical aspect. Our effort from the start has been to determine, first, the total human energy available in the industro-commercial field for the life-support of the Ultimate Consumer, at each decade of our history; and secondly, the proportion of that energy which was dissipated in commercial combat or militarism. *This end has now been accomplished.*

But the real significance of the result will not be fully obvious until it has been translated into relative proportions—into percentages showing to a cent the dilution of the Ultimate Consumer's Dollar, as in Table 45.

But before turning to Table 45 attention is called to the last line of Table 44, giving the ratio of the "Grand Total" to the volume of money in circulation. This shows much greater constancy, now that interest and dividend payments have been included, than in Table 40. While a gradual decrease in this ratio is still obvious, amounting to about 0.30 (or 3 per cent) per decade, showing the influence of the increase in the use of various forms of credit-instrument to augment the governmental

TABLE 44

CURRENT COMMERCIAL DISSIPATION OF ECONOMIC ENERGY (Dollars per Capita of Population, per Annum), 1850 TO 1920

	1850	1860	1870	1880	1890	1900	1910	1915	1920
Commercially Combative Wages and Salaries	$8.87	$13.21	$17.58	$22.91	$32.70	$43.60	$63.30	$70.50	(82)
Interest, Dividends, etc., at 6 per cent (from Table 33)	18.48	30.84	37.44	52.20	62.16	69.90	108.18	127.50	(147)
Total Commercialism	27.35	44.05	55.02	75.11	94.86	113.50	171.48	198.00	(229)
Total Production (from Table 32)	110.68	133.23	141.61	153.69	163.65	169.92	197.47	(206)	(225)
Grand Total of National Industro-Commercial Energy, in Dollars Transferred by the Ultimate Consumer, per Capita of Population per Annum	138.03	177.28	196.63	228.80	258.51	283.42	368.95	(404)	(454)
Ratio of "Grand Total" to Money in Circulation per Capita	11.48	12.89	11.23	11.79	11.32	10.52	10.74	......	......

circulating medium, yet the furthest variation of this ratio away from an even constancy, or from the average for the seven decades, was to thirteen per cent above average in 1860 and to eight per cent below average in 1900.

TABLE 45

THE EXPANSION OF COMMERCIALISM, 1850 TO 1920

(Per Capita of Population)

Percentages of Total Industro-Cemmercial Energy put forth, OR THE GRADUAL DILUTION OF THE CONSUMER'S DOLLAR BY COMMERCIALISM

	1850	1860	1870	1880	1890	1900	1910	1915	1920
Production...	80.2	75.1	72.0	67.2	63.3	59.9	53.5	(51.0)	(49.6)
Commercialism	19.8	24.8	28.0	32.8	36.7	40.1	46.5	(49.0)	(50.4)
Interest alone.	13.4	17.4	19.0	22.8	24.0	24.7	29.3	(31.6)	(32.4)
Relative Rates of Growth (1850 = 100)									
Production...	100	94	90	84	79	75	67	64	62
Commercialism	100	124	141	166	185	202	235	247	254
New York Stock Exchange Securities (1890 = 185) in Proportion to Grand Total									
	...	...	...	...	185	285	332	351	360

The Ultimate Consumer's Purchasing-Power.—Table 45 translates the results of Table 44 into percentages. Since the dollar happens to consist of one hundred cents, Table 45 also shows, in the line labeled "Production," *the actual power for purchasing life-support embodied in the Ultimate Consumer's dollar, stated in cents.* Similarly, the line labeled "Commercialism" shows the number of cents' worth of dilution, or *diluits,* present in each dollar spent. Taken together, these two lines show in the simplest possible manner the destination of the Ultimate Consumer's money, according to the most conservative estimates, after he has mistakenly let it slip across the shop-counter, ticket-shelf or cashier's window without insisting, in an organized unit for the country, upon the assertion of that natural sovereignty over all matters economic which is inherent in the Ultimate Consumer.

Our Mysterious Economic Cancer Identified.—If the publisher would have permitted the use of type an inch high it would have been employed for the first two lines of Table 45. For these simple lines of statistics tell more accurately than any entire treatise upon political economy (although they cannot pretend to include more than a part of the sad news) *what is the matter with modern society.* Yet all the orthodox treatises in sociology omit this, the only firm foundation for the entire question.

Social Malnutrition.—Society, it must be realized, is now ailing merely from malnutrition, due to the circulation within its veins of a diluted circulating-medium, of sheer bogus money —of money which is perfectly good in a legal sense, or in a banking sense, *but which is steadily, rapidly and acceleratingly becoming bogus in a life-supporting sense, by the increasing dilution of its purchasing-power through commercial combat.* Yet all those financial and economic authorities who have been so tremendously worried in past years over the possible inflation of the currency through poor banking-methods, bimetallism, green-backism or the like—all of which worry is proper enough in its true perspective—are taking no cognisance whatever of this utter ruination of our national circulating-medium through commercialism—through a system so obviously inefficient and impracticable that they exclude it religiously from their own premises, but which they condone flagrantly when operated outside, to their own pecuniary profit and to their immeasurable loss in every other way.

This malnutrition of the community, it is to be remembered, through our reliance upon a circulating-medium lacking economic vitamines, is *social,* and not individual. It may result in literal malnutrition of the individual, in any given case, or it may not. But what it does surely, always accomplish is a malnutrition of each individual *in some one or more respects*—here in food, there in fresh air, anon in ideas, elsewhere in morals, etc.—and virtually everywhere in a sense of justice toward one's fellowman. To chase to their lairs all these indirect, yet inevitable, results of this economic malnutrition would require a separate treatise each upon ethics, morals, education, insanity, revolt, etc.

Social Autointoxication.—For this mere malnutrition of the body economic is not the whole, nor the worst, of the trouble. This commercial diluent of our economic life-blood turns out, upon further investigation, to be permeated with an organic *poison.* It not only afflicts us with a social debility, so that we cannot maintain production steadily. It also curdles all our natural milk of human kindness into bitter discontent with life, into an over-readiness on every hand to accuse others of personal fault, in an attempted explanation of the faults of a wrong system as due to individual wickedness.

Yet it must be increasingly obvious to every one of us who possesses a candid mind that the great majority of other people are trying just as hard as ourselves—or are trying, at any rate—to get along with this impossible system, or lack of system, in as decent, humane and Christian a way as is compatible with self-preservation. The widely cherished faith in a humanity so wicked as to explain humanity's major acts is daily becoming so absurd as to be untenable. It is not the wickedness, but the *stupidity,* of mankind which explains its evil acts—a stupidity crystallized into fixed institutions and traditions which, when once adopted, cannot easily be altered. Yet stupidity can be cured, where inherent wickedness cannot.

The Endless Struggle between Capital and Labor a Side-Issue.—Thus it becomes plain—and with a first stage of mathematical accuracy in proof of the fact—that the trouble in the world to-day lies not at all between capital and labor, in any basic or causative sense. It does not lie in the pay-envelope at all, but in *what the pay-envelope will buy.* The issue lies solely between the hundred million Ultimate Consumers, on the one hand, and the institutional effects upon themselves of their blind faith in ownership-in-industry, on the other—finding first expression at the shop-counter and at the employment-window. The last named topic remains yet to be debated; but it is one of the most important resultants of commercialism on the long list of such.

But no space will be taken at present for emphasizing here the full importance of Table 45; for this entire volume, and several more, would be required to portray the ultimate significance of these few lines of figures, when translated into human life.

Neither the author nor any of his readers, except those few whose professions may call them into the slums, the prisons, the asylums and the morgues, can comprehend into what horrid depths of degradation humanity is now daily being indirectly hired and forced to sink, merely by that dilution of our purchasing-power and hiring-power which, in the upper line of Table 45, is recorded crassly as so many cents gone out of each dollar spent anywhere in the land—the decimal measure of the degree to which human energy is everywhere increasingly being forcibly diverted away from the natural and wholesome channels of productive life, by the automatic, subconscious workings of commercialism, and dissipated into what, in the human world, corresponds to the cold, lifeless darkness and oblivion of interstellar space in the material world.

The remaining lines of Table 45 are sufficiently self-explanatory. They exhibit in convenient form the relative rates of growth of the principal economic factors considered. In particular, the last line shows how one feature of commercialism, interest-bearing securities, appears to be growing in volume per capita of total population more rapidly than is commercialism as a whole. Since interest-bearing securities form the explosive element in the economic crisis—the detonator being commercial competition—this fact looms as of especial significance.

Our National Economic Efficiency.—In view of the emphasis now rife in all engineering and administrative circles upon efficiency of organization, Tables 38 to 45 are most discouraging; for they express accurately a thing of which we are all more or less vaguely conscious, namely, the gradual degradation of our national efficiency of economic organization, when gaged by no more hypercritical standard than the familiar factory-system as one hundred per cent, *from not over eighty per cent in 1850 to something less than fifty per cent now*—for these tables do not exhibit all of the unwelcome truth. They show this as due to nothing more mysterious than a mere neglect of organization, where organization should most naturally have been expected—in our national economic activities.

Therefore it is depressing to find that in an ultra-industrial nation which prides itself upon its common sense, patriotism and directness of thought and action—worshiping efficiency so highly as to maintain an entire profession of "efficiency-engineers"—our national showing of mere thoroughness of organization (accepting the material to be organized, whatever it may have been, as the best obtainable) has been *a drop from the already crude figure of 80 per cent, for the very crude era of 1850, to the unspeakable figure of 50 per cent or less in this year of super-scientific and technical refinement, 1917!*

These economic facts are bad enough in themselves, even when regarded as showing merely so much pecuniary or material loss; but in their subsequent ethical results they are (as we cannot emphasize too frequently) far worse. For all "business," when examined in the light of the orderly factory-system, turns out to be merely economic anarchy—each one doing as he pleases; in the lack of public restraint or organization, where there should be the restraint of unitary organization upon each; and the ultimate fruits of anarchy are always individual immorality and social turbulence. The ideas now known as bolshevism are being manufactured, quite subconsciously, under every business-sign now displayed in America.

Yet the obvious remedy for economic and for political anarchy alike is not exhortative moral regeneration. Still less does it lie in stupid repression by force. It lies merely in the exercise of a little horse-sense, coupled with a bit of patriotism, in getting together with one's neighbors—with the hundred million Ultimate Consumers—where hitherto has been aloofness. Here is an opportunity indeed for our patriots who possess leisure and administrative ability!

The Author's Personal Estimates.—If the author's personal estimate of aggregate commercial wages and salaries, "Total *p*," derived from the basic classification of Tables 27 and 28, be substituted for the bald classification itself, in the same line of argument as that which resulted in Tables 43, 44 and 45, there result Tables 46 and 47. In making this use of "Total *p*" the "Grand Total" of industro-commercial energy has been taken from Table 44 without change, and all of it except *p* and "interest" regarded as productive.

Unimportance of the Personal Factor.—It is plain from the similarity between these two sets of figures that the arbitrary choice of factors which characterized the compositon of "Total *p*," departing considerably as it does from the rigid classification of Tables 27 and 28, in an attempt to attain the furthest possible degree of fairness and accuracy, results in a statistical showing not appreciably different from the earlier analysis, except to emphasize the rapidity of growth of active commercial militarism. These later estimates of Tables 46 and 47 show a slightly smaller percentage of commercialism than Tables 43 to 45 in the earlier decades, it is true; but they also show this originally smaller percentage as growing very much more rapidly, overtaking or surpassing the proportions shown in Table 44 by the year 1920.

TABLE 46

EXPANSION OF COMMERCIALISM, AUTHOR'S ESTIMATE

	1850	1860	1870	1880	1890	1900	1910	1920
	$	$	$	$	$	$	$	$
Grand Total............	138.03	177.28	196.63	228.80	258.51	283.42	368.95	(454)
Total....................	5.35	8.03	11.36	15.46	27.46	33.66	54.96	(91)
Interest................	18.48	30.84	37.44	52.20	62.16	69.90	108.18	(147)
Total Commercial.......	23.83	38.87	48.80	67.66	89.62	103.56	163.14	(238)
Net Production..........	114.20	138.41	147.83	161.14	168.89	179.86	205.81	(216)
PERCENTAGES OF GRAND TOTAL, OR THE DILUTION OF THE CONSUMER'S DOLLAR								
Net Production (cents)...	82.7	78.0	75.1	70.4	65.3	63.4	55.8	47.5
Commercialism (cents)...	17.3	22.0	24.9	29.6	34.7	36.6	44.2	52.5

TABLE 47

RELATIVE GROWTHS, AUTHOR'S ESTIMATE OF COMMERCIALISM

(Based upon Table 46, 1850 = 100)

	1850	1860	1870	1880	1890	1900	1910	1920
Net Production.........	100	94½	91	85	79	76½	67½	57½
Commercialism..........	100	127	144	171	200	211	255	332

Thus, whereas Table 44 shows the absolute quantity of commercialism per capita of population as having grown by 837 per cent in the seventy years, Table 46 puts it at 998 per cent. Whereas Table 44 shows the absolute loss in commercial wages and salaries as growing by 924 per cent, Table 46 puts it at 1700 per cent.

Obviously, however judgment may differ as to the details of the classification of Tables 27 and 28, there cannot possibly be any appreciable difference as to the ultimate general conclusion enforced thereby—as to the continuous, extremely rapid and recently accelerated growth of commercialism, and of its detriment to the interest of the Consumer. If only the start may once be made from the viewpoint of the Ultimate Consumer, with his life-support as the true goal, and with at least the familiar factory-system as our highest ideal of what should be the most efficient form of organization for reaching that goal, then these startling conclusions become inevitable.

Graphs of our Economic Evolution.—In order to make clearer the facts recorded in these various tables of statistics their principal results are set forth graphically in Fig. 3. In Fig. 3 the constant height of the rectangle represents, as 100 per cent, the total economic energy put forth by the nation at any stated decade. The clear area below represents that portion of this energy which went to support the life of the Ultimate Consumer. The shaded area above represents the author's estimate of the portion dissipated to waste in commercialism. The line just below the shaded area gives the proportion of commercialism according to a bald interpretation of Tables 27 and 28.

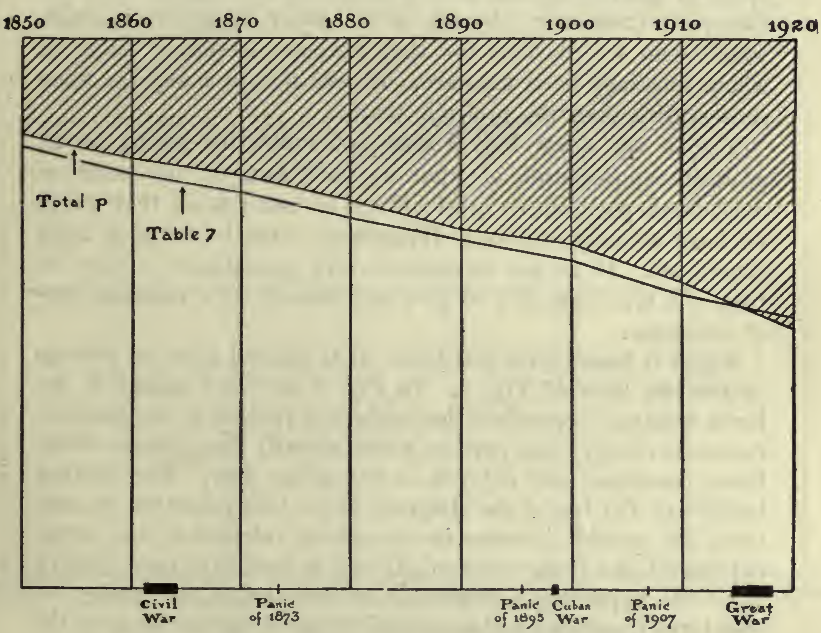

Fig. 3. Decline in National Economic Efficiency

Fig. 3 thus exhibits graphically the central idea which must form the pivotal base about which this and every other economic study must center; for it gives, on the one hand, the proportion of what we have actually gotten out of life to what we might have had, with the same skill and exertion, had we been organized nationally upon the factory-system. On the other hand, it gives that proportion of wasted economic energy which has been misspent in destroying each other's happiness through combat over ownership-in-industry, by all of the many ingenious methods which man has devised for that purpose, including many of whose workings he is unaware. It does this in a way far more conservative than the probable truth.

Yet in one sense Fig. 3 does not suffice for giving us an adequate appreciation of what we have lost, for our sense of unattained possibilities must always be based upon that which we have actually enjoyed. Hypotheses must be founded upon experience. If we are to estimate airy possibilities it must be from the solid actuality of past and present, as a constant base of reference.

Fig. 4 is based upon this idea. It is derived from an average of the two lines of Fig. 3. In Fig. 4 the fixed height of the lower rectangle represents the productive portion of our national economic energy—the portion which actually did produce everything consumed and enjoyed at any given date. The varying heights of the top of the diagram above this measures, in contrast, the possible increase in enjoyment, referred to our actual enjoyment as a base, which might just as well have been enjoyed from the appliances, circumstances, knowledge and energy of that time, *if only we had organized ourselves nationally upon the factory-system from the beginning.* Fig. 4 is merely Fig. 3 with the percentages reversed, yet it appeals more cogently to the eye.

But even Fig. 4, while probably as near to expressing mathematically the lost opportunity for life and growth as can any diagram, is still far short of expressing the truth. For, however man may accept the passing fate of the hour, as to provision for life, as a standard not to be questioned in too self-conscious a way, yet as a matter of fact the material basis for enjoyment of life has not been constant, as is assumed in Fig. 4. It has been growing steadily and rapidly, in spite of the steadily decreasing attention paid to provision therefor. Nor are we unconscious of this fact. We are altogether too fond of congratulating ourselves, if not openly boasting, about it.

Thus, taking our figures from Tables 20 and 24, and comparing only the years 1850 and 1910, it appears that the material supplies of life-support per capita have actually increased in the ratios listed in Table 48. This table shows that everything except pease, beans and rice have increased in quantity, as much or more than the human organism could be expected to absorb, as supplies of mere food. Indeed, the increase has probably gone to export, purchasing for us increased supplies of foreign food or manufactures, rather than to better feeding at home.

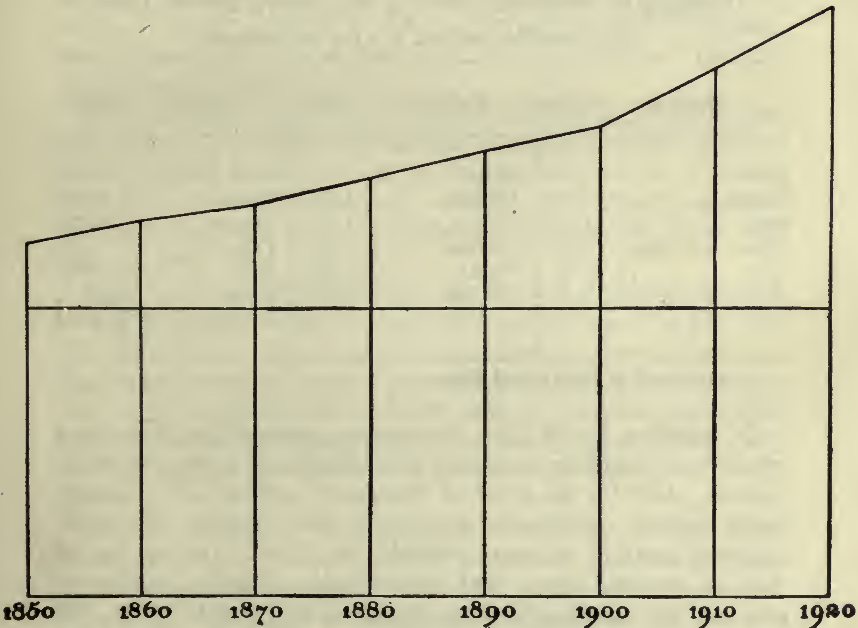

Fig. 4. America's Lost Opportunity

As to the raw materials of the technical arts, they have increased by leaps and bounds. The sole exception is gold; and this is a commodity so cheaply transported that the fact that later production has been largely outside the United States does not affect appreciably our welfare. In regard to the supplies of meats, poultry and eggs, no satisfactory statistics are available so far back as 1850; but Tables 21 and 23 show that since 1880 the supplies of poultry and eggs have been increasing, while meat has held its own in current rate of supply, although stocks on hand are dwindling.

TABLE 48

INCREASE IN MATERIAL BASIS FOR ENJOYMENT, 1850 TO 1910

(All quantities reduced to a per-capita basis)

Material	Ratio	Material	Ratio	Material	Ratio
Corn	1.08	Sugar	1.68	Coal	18.02
Wheat	1.71	Potatoes	1.08	Pig-iron	12.32
Oats	1.73	Hay	1.77	Copper	187.50
Pease and beans	0.50	Cotton	1.10	Lead	5.45
Rice	0.81	Wool	1.39	Gold[1]	0.44
Butter and cheese	1.16	Tobacco	1.34	Silver	200
				Lumber	1.41

[1] Produced in the United States.

In addition to all these staple raw commodities there is a whole list, including even such old reliables as condensed milk, peanuts, steel (in the sense of structural, railroad and similarly bulky sorts), petroleum, aluminum and cement, of which *virtually none at all were available in 1850.* And on top of this, of course, comes that interminable array of composite articles, the result of recent invention and manufacture, for which ratios of increase are impossible, because they were not even known in 1850.

So, if Fig. 4 is really to attempt to portray these opportunities, measured in material bases for enjoyment, which we have been missing since 1850 by reason of our gradual desertion of the factory-system, expressed in terms of those which we have actually enjoyed, then the lower portion of Fig. 4, instead of having a horizontal top, *should rise distinctly and acceleratingly in height.* Yet, however far this lower portion may rise, the upper portion must rise to over twice that height by 1920.

But as no method for averaging the increase in oats with that in iron or copper commends itself to the author as practicable, the design of a diagram such as has just been suggested will not be undertaken. We have reached a point where we must cease parading the accuracy of statistics or diagrams.

Yet only such a diagram as that could represent fairly to the eye the staggering magnitude of opportunity for life and enjoyment which was lost when the early failures of community-enterprise, preceding 1840, led to our loss of faith in our national effectiveness, in favor of reliance upon the most selfish instincts of the individual for the promotion of all industry. Our national economic system is an immeasurably sad instance of "what might have been."

Nor can any such a diagram approach justice to the real situation because it portrays the national waste only as if it affected the individual welfare of all citizens equally, by an even distribution of its burdens over all. But this is very far from being the case. Even the richest have not been fed to the degree that the poor have been stinted.

Loss in Social Vitality Exceeds that Measurable in Economic Energy.—Then the data upon which Figs. 3 and 4 have been built include only those factors of wasted opportunity which stand out glaringly from the statistics as to personal pre-occupation with commercialism. All the indirect economic and moral factors which are resultant from this statistical waste, but which statistics cannot reveal, have been omitted. They must be inferred.

Thus in Chapter XI the sagging of the volume of traffic below normal, due to its load of commercialism, was found to be some figure lying between 70 and 81 per cent. Yet in Tables 44 and 45, and in Figs. 3 and 4, there is revealed only some 50 per cent of sag.

The discrepancy is explicable as being made up partly of profits and surplus, which, with a long list of other factors mentioned from time to time, were necessarily omitted from Tables 44 and 45, and partly of the indirect, psychological discouragement of the potential productivity of the country by the repressive, combative activities of the commercialists—for which first-mentioned result we have no statistical measure. Tables 44 and 45 measure only the latter—the energy visibly being dissipated in combat, attributable to the numbers enlisted in commercial militarism and to their relatively superior energy, together with their direct loot in the form of interest and dividends (but not including profits and surplus, which is now the chief form of loot). The higher figure derived through the computation of Chapter XI, on the other hand, includes both of these factors, namely, the indirect paralysis of the non-combatants as well as the directly destructive energy of the combatants.

For the shaded portion of Fig. 3 measures *only the energy abstracted* by the presence of commercial combat. It tells nothing as to what was done with that abstracted energy. It gives us no measure of the degree to which *that abstracted energy was devoted to destroying some of the good energy left behind*—which is always the indirect effect of exertion in combat. For concepts as to this we are forced to turn to Chapter XI, on "charging all the traffic will bear." There we find that the ingrowing result of the visible abstraction of some fifty per cent of our economic energy, for expenditure in economic combat, resulted in the destruction of about half of the remainder, leaving available for life-support only some twenty or thirty per cent of the original whole.

Our Social Evolutionary Air-Brake.—For the commercial system may be likened in its effect upon our social progress, to the air-brake of a railway-train. The brake-pump on the locomotive, which is the source of all the braking-power for the train, absorbs only a few hundredths of the power of the locomotive. Yet its effect, when applied through the brakes, *is to annul the entire remaining ninety-odd per cent of the locomotive's active power, plus the inertia of the train in addition,* stalling the whole outfit while the locomotive still drives!

Thus the harm done to society indirectly, by the application of the measurable energy of commercialism to the braking of productive industry, is far greater than the energy visible in commercialism itself. The resultant harm bears exactly the same scientific relation, and somewhat the same proportion, to that originating energy of commercialism, that the power-destroying effect of a railway-brake bears to the power employed in applying that brake.

From this choice of alternatives, therefore, between a minimum loss due to direct commercialism of something over 50 per cent, representing the power absorbed in applying the commercial brake, and a maximum probably exceeding 80 per cent, as the total economic energy killed by said application, the reader may select whatever comfort he may be able to find. In either case the situation is hideous, disgraceful and menacing.

Concrete Applications.—But there may be some among the readers—particularly among those practical men of affairs whose attention the author most earnestly seeks to fix—who may wish to make their own estimates, based upon their own knowledge of economic data. Such a man may turn instinctively to his own business, with the details of which he is familiar. He will feel instinctively that there can be no such a huge proportion as that, of wasted to useful effort, in *his* business—and his business, he will feel, must be accepted as a fairly average one.

But let such a man figure carefully. He must remember that his productive organization, whatever its line, handles, in the form of purchased materials and supplies, large funds of economic energy already "canned," each with its own quota of wasted energy bottled up therein in the form of price. Every pound of coal, iron, paint, etc., every foot of gas and every kilowatt of electricity which he buys as raw materials already has had embodied within it, before it reaches him, its full allotment of costs of selling, advertising, financing, etc.

So he must start his accounting by deducting from his gross costs all money paid for materials and supplies, including insurance, etc. What balance then remains, out of his gross receipts from the Ultimate Consumer of his goods, then represents what said Consumer pays him for *that portion of industry lying within the confines of his business.* This is the sum which he must divide between productive and commercial costs respectively.

From this net sum he must next deduct, as commercial costs, the rent of all site and buildings occupied, whether at the factory or at the city-office, whether such premises be owned by him or not; all salaries or part-time accounts of those who concern themselves with tasks other than true production; all interest and dividends paid; all profits made and all surplus accumulated. What remains should check out with the costs of true production visible in wages and depreciation of plant, including superintendence and invention; for these alone are the true, natural, factory-system costs of producing what he sells.

The proportion of this final net cost of true production to the net sum remaining after deducting supplies, etc., will reveal to him the percentage of *efficiency of organization* of his own line of work. Any businessman honestly performing this accounting will be astonished at the result.

Thus the superintendent of a certain factory brought to the author's attention a minor accessory in the automobile-trade which he was producing in quantities—finished, wrapped and packed for mailing, addressed and postage paid—for 12 cents each. Yet he was losing money in selling these for a dollar each!

Yet in this cost-figure of 12 cents had already been included all of the raw materials and supplies, each item of which already comprised its own quota of commercial costs, probably equal, in some cases, to the present factory in proportion. When all these have been deducted there is but a small part of the 12 cents left as purely productive work *performed within the factory in question.*

Yet all of the remaining 88 cents of the dollar was chargeable to commercial costs attachable to this less than 12 cents of productive costs; for there were no further productive changes wrought in the article after it was mailed. If the items of raw materials and factory-supplies to be deducted from the 12 cents amounted to only half the productive costs within the factory, or 4 cents, that would leave these productive costs (although even then including some "factory-profits") as only 8 cents. Yet the commercial costs attached thereto amount to *over eleven times this sum!*

While many commodities are handled upon a smaller margin of commercial costs than this, yet there are also others which exceed it.

The Reader's Responsibility.—The reader may protest that he is not capable of remedying this sort of inefficiency of disorganization in his own business and therefore that he is not responsible. We are not holding him responsible for our national inefficiency, nor for the lack of national organization, *but for his failure to denounce it publicly,* so that all may get together to remedy what no one alone can touch.

For it is not the followers of Alexander Berkman and Emma Goldman who constitute the worst, nor the typically American, anarchists; for these, however wrong in conscious philosophy, are relatively harmless. They talk much, but they do little, in the anarchy line.

Instead, America is now actively manufacturing, upon her usual scale of energy, her own peculiar brand of real, effective anarchy—commercialism, or ownership-in-industry. It is true anarchy. It is based upon the belief in every American's right to do just as he pleases in the economic world—just as he pleases with the Consumer's money—owning anything in sight which may promise a profit to him for owning it, and holding it for any price which he may extort. He is deaf to every protest from the Ultimate Consumer—impatient of every restraint imposed by law upon his commercial licentiousness. He holds this to be a right as sacred in his philosophy as the "right" to live without government appears to the philosophical anarchist.

This simon-pure American brand of anarchy is of course unaware of being anarchy; but it is none the less effective for that. It talks little, or not at all; but it "does" the Consumer gigantically, in both senses of the word.

It accomplishes a tremendous lot of real destruction. It is apparently the source and father of all other brands of anarchy, American and European. It is not imported. We lead the world in its manufacture.

We are creating here, more rapidly than any other land, economic conditions which, whatever may be the words in the mouths of their creators, destroy riches, create poverty, undermine political liberty, dilute the purchasing and hiring power of the Consumer's dollar, develop (as will appear later) a deficit in the normal demand for labor, and degrade every moral fiber of the nation. Like every other American enterprise, this home-brand of systematic, active anarchy known as *commercialism* surpasses everything European in its magnitude, daring, speed, power, and its reckless menace to society.

The resultant outcropping of a flood of conscious philosophical anarchy among the ignorant, bred of poverty, high prices and unemployment, and of pessimism amongst the educated, is then inevitable. But the really responsible source of all this is the American business system—or lack of all system.

CHAPTER XVIII

INDIRECT LIGHT UPON THE GROWTH OF COMMERCIALISM

Transportation and Communication.—Commercialism has been shown by the diagrams and tables which have preceded, and particularly by Figs. 3 and 4, to be a social phenomenon which is fast approaching the critical point. In the past all such critical social growths as this have arisen as the unintentional, yet inevitable, result of certain other activities of society which in themselves were natural and wholesome social acts, quite devoid of obvious connection with the results in question. Of such causative activities the one which stands out most prominently in the present instance is *improvement in the arts of transportation and communication.*

If one gives to this term "communication" its broadest possible significance, so as to include appliances for printing and display with those for overcoming distance, certainly our growth in this direction may be granted the honor of being lord over all modern national and international crises. For it is by improvement in our means for physical transportation and mental communication that men and communities previously unable to interact upon each other, because of their mutual isolation, are first brought into effective propinquity or actual contact. Ultimately such contact always leads to wholesome co-operation and mutual enrichment; *but its first effect is always friction and impact, usually finding vent in war or revolution.*

The invention of improved appliances for communication between man and man is one of the most natural, innocent and commendable of all human instincts. Yet time and again in history its first fruits have been either some horrible war, or else a worse internal convulsion. Just as our blundering first use of newly invented machinery begets horrible accidents, which mutilate and kill human bodies in a frightful manner, so our equally blundering use of newfound propinquities between man and man, in newly formed congestions of population or newly forged links joining continents, begets social collisions, explosions and similar catastrophes of a more figurative nature, yet which maim, stunt and kill the minds and souls, as well as the bodies, for millions instead of dozens, in social crises the causes of which are more mysteriously hidden than those of the proverbial railway-accident.

Here our investigation of the growth of such communicative inventions need not be confined to any particular field, such as transportation and communication in their literal sense, for virtually all fields have contributed to the close congregation and vital interaction of man with man here in America. Thus all inventions in the art of illumination, in the writing and duplication of letters, in moving-pictures and a thousand similar things, have all operated to intensify the frequency and intimacy of contact between man and man, and his ability to transmit ideas promptly from one to many. Hence all these have directly fostered commercial combat. For man's first instinctive impulse, upon meeting his fellow, is either to fight him or, being forbidden that by unprofitable experience, to make money out of him—which leads ultimately to the same end.

The arts of printing, paper-making, lithography, photogravure, etc., for placing ideas before large numbers of people with increasing speed and decreasing cost, have vied with the increasing ability of railroads, steamships, telegraphs, telephones and wireless to bring those ideas promptly from the uttermost corners of the earth. Equally important is the field of prime movers, and of the transfer and subdivision of power from those prime movers by electrical means, in bringing together armies of men and women in factories and shopping-districts. From the power-loom to the elevator and moving-stairway, invention has everywhere been the prime causative force in the development, by sheer congestion, of that most intricate situation known as the modern social problem. It has done this, in essence, merely by permitting, or inviting, or enforcing, a novel and at first misunderstood *propinquity and interaction* where before had prevailed isolation and mutual independence.

Invention.—The history of American inventiveness, as exhibited by the records of the Patent Office, is set forth in Table 49. While not every patent, nor every tenth patent, necessarily represents a successful invention, yet the proportion of successes to total may be accepted as remaining constant from decade to decade.

The first significant column of Table 49, Column 3, shows how tremendously the social factor of invention has been growing subconsciously into our lives during the last eighty years. In 1915 the rate of issue of patents *per capita of total population* per annum had become *almost sixteen times that of 1840!*

It is also significant that the virtual beginning of the era of patented inventions, 1840, coincides with the virtual beginning of the modern era of interest-bearing securities (as noted in the past chapter upon Credit) and, precedes by only a decade the date (1850) which was adopted in our statistical tables as the beginning of modern commercialism. Thus the period of social evolution now approaching its climax has been peculiarly one, in the first place, of scientific, technical and inventive activity.

It is as an inevitable consequence of this, and not at all as a result of any peculiarities of individual psychology, that this period has also been one of an even more rapid and intensive growth of commercialism, with its promise of an early and serious crisis. Our present social growing-pains and spasms, inclusive under the blanket-terms of strikes, bombs and Bolshevism, are nothing more mysterious, at root, than a sociological tummy-ache due to undigested inventions.

Invention a Cumulative Process.—But the production of inventions is a cumulative process. An invention once made is often useful perennially. Whereas patents always expire after seventeen years, inventions do not always do so. Some become obsolete, it is true; but most of the successful ones come into their greatest usefulness only after the expiration of the patent. Hence the patent-productivities shown in Column 3 of the table must be imagined as steadily at work throughout the last seventy years, piling invention upon invention at a fairly constant rate to an ultimately stupendous aggregate.

Column 5 of Table 49 attempts to set forth this rate of accumulation of inventions per capita. Whereas the rate of production of patents (Column 3) has increased by 10.5 fold during the sixty-five years from 1850 to 1915, the resultant aggregate accumulation has grown by the enormous ratio of 37.1 fold! Moreover, *one-half of this gigantic accumulation of novel appliances has been accomplished since the Spanish*

War of 1898, and one-fifth of it since Mr. Wilson has been in the White House!

TABLE 49

GROWTH OF INVENTION (U. S. PATENTS), 1840 TO 1915

Year	Period of Years Averaged Together	Rate of Issue of Patents		Aggregate Patents in Existence, per 100,000 Inhabitants	Product of Number of Patents by Population: Index Based upon Unity for the Year 1840
		Per Annum per Million Inhabitants	Increase in Rate: Percentage per Annum		
(1)	(2)	(3)	(4)	(5)	(6)
1840	1	28	....	....	1
1850	1	43	4.4	30	3
1860	5	126	11.3	85	15
1870	5	350	10.7	255	64
1880	5	305	−1.4	445	94
1890	5	374	2.1	665	180
1900	5	340	−1.0	839	243
1905	5	386	2.3	....	332
1910	5	389	0.0	1026	403
1915	1	445	8.0	1113	556

These facts are all but incomprehensible. Yet it is this astounding situation as to invention which alone is competent to explain the marvelous acceleration in the growth of commercialism which has signalized the last few decades. Heretofore in this book this accelerating growth of commercialism has been noted merely as an historical fact. Now the history of invention offers an adequate explanation of that fact.

The rate of increase in this American tendency to invent, however, has not been constant throughout the decades. See Column 4. Two comparatively short periods of rapid advance stand out conspicuously beyond all others.

The first of these periods extended from about 1848 to about 1872. The second and much less marked advance has been entered upon since these pages were begun. Whereas the mean rate of increase in rate of issue of patents, from 1840 down to the present time, has averaged only about 3.8 per cent per annum (with the corresponding average from 1870 to the present time only about 0.5 per cent), yet the average rate of growth in the rate of issue maintained during the five years from 1850 to 1855 was about 20 per cent per annum! In the single year of 1865-66 a rate of growth of 43 per cent was attained, followed by 38 per cent again during the succeeding year! Such is one effect of war.

At no later time has there ever been any outburst of growth in inventiveness as sudden as this. From 1873 to 1914 the figures of Table 49 (averaged just as they stand) come to less than one-half of one per cent per annum. Even the present acceleration, so far as recorded in 1915, has amounted to only 8 per cent per annum.

It is plain that the turning of the people to patented invention, which had been legal and had been practiced upon a small scale since the eighteenth century, did not occur in any great measure until after 1840. Then it took shape rapidly, was markedly accelerated rather than hindered by the Civil War, culminated to a maximum immediately after the attainment of peace, and then fell to a minimum again at about the time of the panic of 1873. Since then merely a slow rate of growth in the rate of issue has prevailed until the present decade, which may or may not witness the development, from the same cause as that of 1865-67—war—of a new era of growth equal to or greater than the earlier one.

But the statistics of patents are of the few which should not be stated "per capita." Whereas a bushel of wheat undergoes a finer subdivision of its usefulness as the population relying upon it increases, the usefulness of an invention actually *increases with the population.* Therefore, in order to pave the way for later studies in this direction, the last column of Table 49, giving the product of patents and population, rather than their quotient, is added.

Sociological Lag.—Between the date of issue of a patent, as a cause, and an increment in commercialism as an effect, there must exist considerable "lag." It takes years to develop and market an invention, a task often not accomplished until the patent has almost expired, and further years for that invention to exert its influence upon the number and intricacy of commercial enterprises in action. With this lag remembered, the function of invention as a stimulator of commercialism is easily seen in the record.

TABLE 50

GROWTH OF COMMUNICATION IN PROPORTION TO POPULATION, 1800 to 1915

Year	Post Office (per Capita)		Telegraph per 1,000 Inhabs.	Telephone per Thousand Inhabitants		
	Ordinary Stamps and Postal-cards Issued	Gross Expenditure	Messages Per Annum	Miles of Wire	Number of Instruments	Daily Messages
1800	....	$0.04	....	....	....	....
1810	....	0.07	....	....	....	....
1820	....	0.12	....	....	....	....
1830	....	0.15	....	....	....	....
1840	....	0.27	....	....	....	....
1850	....	0.22 [1]	....	....	....	....
1860	7	0.61	....	....	....	....
(1867)	....	....	161	....	....	....
1870	12	0.62	237	....	....	....
1880	23	0.73	582	0.68	1.08	....
1890	42	1.05	888	3.8	3.72	7.2
1900	60	1.41	....	....	....	....
1902	....	....	909	63.6	30.35	66.4
1905	77	2.00	....	....	....	....
1907	....	....	859	137	56.3	327
1910	106	2.50	....	....	....	....
1912	....	....	(942)	199	76.6	393
1915	121	2.95	....	....	....	....

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[1] The custom of prepaying postage came in only about 1850, with a considerable drop in rates. Note the birth of activity in the figures for 1840, the year which seems assignable as the birth-year of commercialism in its modern sense. Note also, in the lower lines of the table, the marked acceleration of all data in terms of time.

Communication of Messages.—Of all the results of invention, none—possibly excepting the railroad and the steamship—have had greater influence in stimulating the growth of commercialism than the facilities for the transmission of messages, whether by mail, telegraph or telephone. Table 50 shows statistically the increase in these facilities, and in the use of them, in proportion to the population. The figures for the telegraph are from one company only, it being necessary to assume that they are probably proportional to the total for all companies. Yet the falsity of this assumption is plainly visible after 1890.

The wonderful growth into our daily lives and habits of thought of these facilities for the transmission of messages can scarcely be indicated by statistics. To say that we now use fifteen times the volume of postal facilities per capita, as compared with what we did in 1850, with all our telegraphic and telephonic facilities in addition, means little. The human energy now currently absorbed merely in communicating our thoughts to one another is marvelous. *Yet the energy released by the act is far greater still*—quite beyond our comprehension, in fact. For the social energy released by the investment of a given amount of exertion in the maintenance of free communication of ideas is in about the same proportion that the mechanical energy released through the wheels of a locomotive bears to the muscular effort involved in feeding the coal into its furnace.

Between the years 1907 and 1916 the Bell Telephone Company alone is reported as having invested, in the mere extension of its facilities, twice the cost of the Panama Canal. Yet the Canal itself is a new means of communication which is by no means negligible in its importance for the promotion of world-commercialism—yet one which does not appear in our statistics. According to the telephone-people, this nation in 1915, then having only six per cent of the world's population, maintained in use *fifty-four per cent of its total equipment with telephones;* and America is the most commercial country in the world.

Newspapers and Periodicals.—In general, the evolution of the newspaper or periodical in American history has been not merely one of quantity, but primarily one of form and function. The publications with which we are now familiar as newspapers or periodicals would scarcely be recognized as such, if we could submit them to the public of a century ago.

For the newspaper of the period from colonial to nearly Civil War days was purely what its name indicated: a sheet printed and circulated almost wholly for informing or entertaining the subscriber, by whom the bulk of its cost was contributed directly. The result of this policy was a real profession of journalism, exemplified by the great dailies and journalists of the mid-victorian period. These personalities were a daily guide to millions, and a real force in the conduct of our national life.

Commercialism and Journalism.—But to-day this aspect of our current publications has altered so completely as to be virtually gone. The newspaper or magazine of to-day exists primarily for the purpose of advertising. It is supported mainly by its advertisers, and it is therefore controlled in its editorial policies almost exclusively by the selfish interests of its advertisers.

Advertisers, of course, cannot be had without subscribers; but the latter are secondary and the former primary, both in the support and in the control of the modern sheet. The subscribers play the same sort of a second-fiddle rôle to the advertisers that the Consumers do, in general, to the stockholders in other enterprises. In neither case can they be dropped from the orchestra, but in neither case do they lead.

The horde of new and increasingly superficial periodicals constantly appearing is stimulated into existence only by the increasingly profitable business of advertising. In each case, of course, the thing rests upon the Ultimate Consumer or subscriber for its support, just as does our maze of duplicated shops, our dirty streets, our crowded cars and our bizarre waste of light in electric signs, none of which the Ultimate Consumer desires. But in each case the appropriation of the money collected from the Ultimate Consumer for these things is determined, *not by the source of the money, but by the agency for its collection.*

The political hue or literary standards of each of the weeklies, dailies and monthlies, great or small, is no longer the expression of a single man of genius, supported by a clientele of public opinion, as was the case two generations ago, but that of an unimaginative board of directors, the coldblooded machinations of which are guided solely by its commercial relations with its advertisers. Journalism has long ceased to be a manifestation of either taste or intellect, whether that of the editor or of the subscribers, and has ceased to be a pure profession. Instead, it has become merely one subordinate department of our greatest American national institution—commercialism.

In the earlier periods of journalism the subscriber paid his money directly to the periodical; he paid it for journalism; consequently he received journalism. But to-day he pays his money most indirectly. It goes first across the shop-counter of the retail merchant—ostensibly as a part of the inevitable cost of dry-goods or the like, but in reality for advertising; and the advertising, we have seen, becomes necessary only because we allow a number of merchants to duplicate each others' efforts in parallel—as no manager of any factory ever permits—where there should be but one merchant.

Thus the money travels from its original source, the Ultimate Consumer, to the periodical through the agency of the advertiser. Therefore *it reaches the periodical not as an expression of the literary or political desires of the subscriber, nor even those of the Ultimate Consumer of the thing advertised, but solely of the commercial desires of the advertiser,* who neither consumes the goods advertised nor reads the periodical's occasional columns of text. And the advertiser's desires are neither individual nor national nor literary life, but cold, private profits.

Automatic Involuntariness again.—Here we have another instance, similar to that of the messenger-boys in Chapter VII, of the complete reversal of the economic, ethical, political and moral effect of the expenditure of a given amount of money, by a people of given moral and patriotic standards, *merely because of the peculiar form of organization chosen for the transmission of the popular will.* There need be no argument that the modern newspaper has lost its influence, nor that it is personally venal. Its transformation and degradation has consisted merely in its having abandoned its proper rôle of expressing the subscribers' tastes for that of cat's-paw for its advertising patrons.

The demagogue or muckraker is daily urging that the newspapers are "sold, body and soul" to certain "interests." The editors thereof, innocent of bribery, are as frequently repelling the charge with scorn. But both sides are right. The editors are innocent of crass bribery, it is true; but they are guilty of an offense equally destructive to the fiber of the nation, however lacking recognition in the penal code, namely, *that of accepting a salary from a board of directors which is paid through profits earned by advertising.*

They may be personally helpless to alter this evil system, as a whole; *but their first professional duty is to insist upon condemning it publicly, at their every opportunity.* The least they can do is to maintain toward hired, constrained journalism the same attitude that the medical profession maintains toward quackery and proprietary medicine, or which the bar maintains toward venal practice of the law. The editor who prints paid advertisements under the same cover which he sells to the subscriber as reading-matter should not be admitted to membership in any professional organization, nor to any gentleman's social club.

For the failure of the journalists, as a professional body, to maintain this attitude of self-respect stands as one of the worst of our many locked-down safety-valves of public opinion which to-day are inviting the inevitable boiler-explosion. When the point has been reached, as to-day, where one man, not by reason of his journalistic ability, but through his subserviency to his advertising patrons, controls absolutely the editorial policy of daily journals having an aggregate circulation of over two millions, with magazines of a like total monthly circulation—and when that man, as now, inevitably happens to be conspicuously lacking in patriotic vision—then it is high time for the lover of liberty to take alarm over the control of our national ethics by a reckless economic autocracy.

Modern Muzzling of Free Speech.—But let any man or society start out to oppose these selfish interests, whether of the individually owned editorial policy of any journal or of the unorganized group of advertisers back of the same, and it will soon appear wherein lies the real power of directing modern public opinion. The reformer will find himself as impotent to give adequate expression to his views as was every liberal thinker in Europe during the eighteenth and nineteenth centuries, when political liberty did not even pretend to exist, and the rigid muzzling of the press by arbitrary authority was accepted without question.

In those days the inevitable result of the restriction of free speech was the fostering of as unjust a political autocracy as history has ever recorded. It was only as a secondary reaction against this autocracy that the periodic conscious revolutionary outbreaks occurred. The primary and subconscious and therefore inevitable, fruits of this systematic repression of free speech we are now enjoying, in the Great War of 1914.

To-day we shall find that the laws of social evolution have not changed. To-day a muzzled press is fostering an unjust, oppressive autocracy in America as surely as it did a century ago in Europe. To-day we need to learn that political liberty is all but impotent and valueless without economic liberty, and that neither can be had without an absolutely untrammeled journalism.

History of Journalism.—The first half-century of our national existence witnessed a progress in periodical literature which lay merely in the number, size and circulation of publications. During this period periodicals exerted a very real and growing influence for national solidarity, which had much to do with guiding, or even enforcing, the political acts of that day.

This period was one of a gradual consolidation and cementation of the nation, from the amorphous condition of the thirteen colonies immediately after independence had been won—separate "sovereign" states enslaved by their mutual jealousies, too loose and too lifeless even to adopt a federal constitution, until compelled by internal disorders to do so—to that of Gettysburg and Appomattox, when stress had proven that a unified national government, of, for and by the people, could indeed exist and coerce. The history of this time was not merely the result of the invention of facilities for communication in the freight-train sense of the cotton-gin, the steamboat and the railway, although these purely mechanical forces constituted a factor in the control of our destinies which has been too commonly overlooked. It was also communication in the mail-car sense of acquainting New England with Minnesota and Louisiana, through the medium of better and cheaper paper, clearer type and faster presses, as well as of quicker transportation, which guided the procession of national events.

Yet all this earlier growth of journalism was virtually free from commercialism. The period of the latter's appearance in this field may be dated from the inception of the penny-paper—*the paper which relied upon low price, rather than upon literary or informative merit, to increase its circulation, and then upon the advertising made possible by this circulation for its main income*—thus misleading both the subscriber and the Ultimate Consumer as to the real price of the paper, and the real source of its editorial views, and blocking or distorting the true expression of their desires.

The first penny-paper of magnitude was the New York *Sun,* appearing in 1833. The United States census-report for 1880 (Vol. 8, page 89) quotes Mr. Day, the founder of the *Sun,* as saying at a banquet in 1851:

> "It is true that I originated the *Sun*, the first penny-paper in America, and, as far as I have known, the first in the world; . . . I issued the first number of the *Sun* September 3rd, 1833. . . . At the end of three years the difficulty of striking off the large edition on a double-cylinder press in the time usually allowed to daily newspapers was very great. At that time all the Napier presses in the city were turned by crank-men. In 1835 I introduced steam-power, now so necessary an appendage to almost every newspaper-office. . . . But even this great aid to the speed of the Napier machines did not keep up with the increasing circulation of the *Sun*."

The remarkable rapidity of growth in consumption of periodical literature per capita, throughout our entire history as well as merely that resultant from the adoption of this policy, is shown in Table 51. But this growth, in spite of the per-capita figures, has by no means been spread evenly over the entire population. As the center of population has moved westwardly from Baltimore, where it lay in 1790, almost exactly upon a parallel of latitude, the chief field for periodical literature has remained to the northward of that line, and has moved parallel with it. New England first, and after that the northern Middle West, settled largely by New Englanders, has been the natural habitat of publication. Virginia and her neighbors took from the start almost as strong a stand against the introduction of the printing-press as New England did in its favor.

The United States census for 1905 (Special Reports: "Manufactures," Part III, page 742) says of Massachusetts, New York, Pennsylvania, Michigan, Ohio, Indiana, Illinois, Missouri, Minnesota and California:

> "The ten states which proved to be the largest producers of daily circulation in 1905 have contributed practically the same proportion of the total circulation since 1850."

The growth set forth in Table 51 has been fairly steady and very rapid, averaging 9.2 per cent per decade for number of publications, and 33 per cent per decade for number of copies, per inhabitant, over the entire century. The columns of percentages of growth show, by the irregularities at 1880, what is probably some discrepancy in classification. The growth in number of publications is unusually high for this decade, while that of total copies is unusually low, the average being made up by the unusually high figure for the following decade.

But otherwise the figures are concordant. The rapid increase around 1840-50 may indicate the effect of the introduction of the big-circulation, advertising type of sheet in 1833, as just noted. The reaction between 1905 and 1910 is doubtless due to the panic of 1907, which would affect deeply a community of periodicals which had grown up on the artificial stimulus of advertising.

TABLE 51

GROWTH OF PERIODICAL LITERATURE, 1790 TO 1910

Year	Number of Publications per Million Inhabitants	Total Copies per Inhabitant per Annum[2]	Percentages of Growth per Decade	
			Publications	Circulation
1790	26	.....	....	....
1810	49	3.8	44	....
1828	70	5.9	24	30
1840	95	13.8	30	112
1850	109	21.8	15	50
1860	129	29.5	18	35
1870	152	39.1	18	33
1880	225	41.2	48	5
1890	237	74.2	5	85
1900	239	103.0	1	39
1905	255	123.3	13	39
1910	241	125.8	−12	4
1915	229	158.5	−10	52

[2] Before the Civil War the figures refer to white population only.

That the general change described above has not been due to any general alteration in public taste is visible from the steadiness with which the relative proportions between dailies, weeklies and monthlies have held respectively throughout the one hundred any twenty years from 1790 to 1910, as shown in Table 52. The relative decline of the weekly since 1880 is probably due to the fact that previously to that date the weekly formed the popular reliance for a news-sheet, whereas since then the daily has become more accessible to the rural districts while the weekly has become more purely a review. But this statement applies, apparently, more to the number than to the aggregate circulation of the two sorts of journal.

TABLE 52

PERIODICALS—HISTORICAL PROPORTIONS BETWEEN CLASSES, 1790 TO 1910 (Percentages)

Year	Number of Publications				Aggregate Circulation			
	Daily	Weekly	Monthly	All Others	Daily	Weekly	Monthly	All Others
1790	7.8	68.9	5.8	17.5	....	....	....	....
1850	10.1	75.3	4.0	10.6	55.6	35.9	0.2	8.3
1860	10.0	78.3	6.9	4.8	49.9	42.5	0.4	7.2
1870	9.8	73.2	10.6	6.4	54.0	36.5	0.4	9.1
1880	8.6	76.3	10.3	4.8	54.0	40.9	0.5	4.6
1890	12.8	71.6	11.6	5.0	56.2	32.2	0.5	11.1
1900	12.2	71.2	10.0	6.6	60.1	22.7	0.6	16.6
1905	11.5	70.3	11.7	6.5	63.9	18.5	0.7	16.9
1910	11.7	68.2	11.2	8.9	65.6	18.4	0.6	15.4

''Boiler-Plate'' Journalism.—The prostitution of journalism to advertising-purposes was much aided by the introduction of the practice of using "patent insides," or "boiler-plate," for the reading-matter of many newspapers—the slang terms referring to the practice of making up at some central city-bureau copy which would be of interest to the general public, setting it up and stereotyping it, and then selling the plates or the printed pages bodily to large numbers of subscribing newspapers scattered about the country. These newspapers then inserted these pages along with others containing local news.

The scheme was started in Milwaukee in 1864, and during the next sixteen years, according to the census-report for 1880, spread chiefly over Illinois, Iowa, Ohio and New York. It then covered a subscription-list of 3238 newspapers, almost entirely weeklies.

The plan is praised in the census-report as a commendable instance of "co-operation" in the printing of periodicals. Without asserting that it contains no germ of value, certainly its use in connection with advertising-sheets exaggerated journalism's worst evil, forming one of the very worst of the many bad economic enterprises which have masqueraded under the much abused term co-operation.

Growth of Advertising.—As to the rate of growth of advertising itself, this is a topic worthy of the best corps of statisticians available in the land. No single investigator, nor any few pages in a general treatise such as this, can begin to do it justice. That advertising has grown tremendously as a national feature needs no statistics for its proof. But to reduce its growth to statistical measure would require the efforts of an entire census-bureau corps. The data given in Tables 53 and 54, drawn from census-reports, are submitted as mere flashlights upon a gigantic topic.

TABLE 53

GROWTH OF ADVERTISING IN PERIODICALS, 1863 TO 1910

Year	Proportion of Total Income Drawn from Advertising, Per Cent	Cost of Advertising in Periodicals: Per Capita of Population per Annum [3]
1863	..	$0.04
1864	..	0.13
1865	..	0.22
1866	..	0.27
1867	..	0.26
1880	44	0.78
1890	49	1.13
1900	54	1.26
1905	57	1.79
1910	60	2.20

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[3] This is the cost at the newspaper office—what might be called the wholesale price. The cost at the consumer, after passing through the hands of the sellers of advertising and through the books of the advertiser, where is inevitably added a profit upon every cost of doing business, must have been considerably greater.

Charging Literature All the Traffic will Bear.—The unusual rate of acceleration of advertising which began in 1864 is merely another item of proof, among many, of the marked outburst of commercial prosperity which appeared in that year. Since then the space given up to advertising has increased even more rapidly than the cost, because of the decreased cost of printing per unit of area. While pecuniary cost to the reader is the main issue in this analysis, yet also to be considered is the clumsy burden forced upon him in the inevitable handling of all this undesired advertising-space, when he desires only news—a feature of no mean detriment to a civilization making the claims to efficiency which our present one does, nor in one in which a paper-famine threatens.

The census for 1880 gives some figures as to the advertising-space in certain New York dailies for that year, which are reproduced here in the first line of Table 54. To this is appended, in contrast, similar figures taken from unselected issues for the years 1913-16. The growth is startling. It should be noted, incidentally, that the decrease in absolute amount of advertising in 1916, as compared with 1913 and 1915, does not necessarily signify a decrease in commercialism, since the proportion of advertising to total space remained about the same.

The year 1916 was one of a peculiar form of commercial prosperity, due almost entirely to war-orders. Not only did print-paper become both scarce and costly, but factories everywhere were months behind their orders. They were not catering to the public, but to the government, and had no need to stimulate demand by advertising. During this year 1916, in spite of all the war-news from Europe, in addition to our own *de facto* war with Mexico—together offering more news than had been available for a generation—*the total size of the daily papers averaged from twenty to forty per cent smaller than in 1913-15,* probably due to the increased cost of paper and other war-expenses.

But the proportion of advertising-space was not altered. As more news offered itself, and as the public became more keenly interested, the news-space was not expanded at the expense of the advertising, as would have been the case had the policy been guided by the preferences of the subscribers. In other words, the amount of news dealt out to the subscriber, as well as its quality, *depends not at all upon his personal demand for news, nor upon the supply.* It depends wholly upon commercial considerations. In modern journalism as elsewhere throughout our economic system, the law of supply and demand gets but a microscopic chance to operate.

It is these commercial considerations which dictate in the first place, the size of the paper as a whole. Then out of this the reader is given, regardless of other conditions, *that maximum proportion of advertising-space which experience has proven the traffic will bear*—that is to say, which will dissuade only a fraction of the subscribers from stopping the paper, in preference for some other sheet which is doing the same thing. In this defiant disregard and reversal of the law of supply and demand by commercialism, journalism is quite in parallel with our food-supply and every other commercial enterprise. But our editors might at least confess the fact!

TABLE 54

INCREASE IN ADVERTISING SPACE IN NEWSPAPERS, 1880 TO 1916
(Columns of Advertising Space)

	Times	Sun	World	Tribune	Herald	American	Press
1880, "Sample Sunday"....	22	10½	14½	13	92	..	..
Sunday Issues:							
1913, Nov. 24..	325 [4]	..	..	..	..	..	..
1913, Dec. 7..	394	..	..	..	..	..	..
1915, Oct. 3..	360	..	..	..	..	..	..
1915, Oct. 10..	313	..	..	..	..	..	..
1916, July 9..	270	99	282	87	260	..	..
1917, Oct. 14 [5]	386	..	..	..	..	..	..
Daily Issues:							
1913, Nov. 25..	66	..	..	..	..	..	..
1913, Nov. 29..	108	..	..	..	..	..	..
1913, Dec. 2..	...	..	79	22	..	59	30
1913, Dec. 4..	...	..	82	..	..	..	..
1917, Oct. 10 [6]	105	..	..	..	..	..	..
1919, June 20..	190	..	..	..	..	..	..

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[4] The Sunday, according to the *Times*, following "the dullest week in Wall Street in many years."

[5] Less than 42 per cent reading-matter and pictures.

[6] In this issue just one-third of the total space was news-matter, including the title-caption as such.

This proportion of advertising (including with it the financial news, as also being commercial) now varies usually between some forty and seventy per cent of the whole, leaving only about one-half to one-third as real news.[7] Occasionally the reader gets in the form of news or amusement as much as one-half of the paper, for which he pays the entire cost. If so, he is in luck. Sometimes the fraction runs as low as one-quarter.[8]

In most of the magazines there is no financial news, all space counted as advertising being purely such. On the other hand, purely financial journals of course must be charged up in entirety to commercialism, as a waste to the community.

Literature's Growing Burden.—The New York *Times* recently published its own record of the growth of its own advertising-space during the last twenty years, in figures which have been put into the form of Table 55 for present purposes. These figures refer, of course, only to pure advertising; but the financial news has also grown about in like proportions, so far as one can observe.

Because the general burden of commercialism, which is centered chiefly in the cities, has been depicted here as constantly being distributed therefrom over every citizen of the land, in the cost of commodities, so it is proper to state these figures as to the growth of advertising in a metropolitan daily, such as the *Times,* in proportion to the national, rather than the city, population. This has been done in Table 55.

In this table it is the last two columns, giving the rate of growth of the total output of advertising-space by this journal, per capita of population of the United States—taking account of both the number of copies issued and the space per copy—which are of the greatest significance in revealing the rate of growth of advertising. It is doubtful whether there be in this book a better indicator than this—including in one set of figures, as it does, both the increasing congestion of population in large cities and the intensity of advertising amongst that population—of the tremendous acceleration in the growth of commercialism since the Spanish War.

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[7] The first weekly at hand on this date, the *Literary Digest* for May 25, 1918, contained 42 per cent of reading-matter.

[8] The New York *Times* for June 20, 1919, contained just 25 per cent of news-matter, including lost-and-found notices, criminal court calendars, etc., but excluding financial news.

Even the journals of the national professional societies are contaminated by this shameful, mercenary infection. For instance, in September, 1920, the periodical publishing the technical papers of the American Society of Mechanical Engineers devoted 61 per cent of its space to advertising.

Indeed, these figures might perhaps be considered a better barometer of the current state of commercial prosperity than are any of those adduced for that particular purpose in Chapter XXI. The sudden expansion of commercialism in response to the Spanish War of 1898 is most markedly obvious. The minor reaction of 1903 is also visible.

TABLE 55

GROWTH OF ADVERTISING IN THE NEW YORK *Times*, 1896 TO 1916

Year	Circulation per Million of National Inhabitants	Agate Lines of Advertising in Terms of Total Population of the United States		Ratio of Growth of this Last Column: 1896 = Unity
		In Each Sheet, per 10,000 Inhabitants	In the Aggregate Circulation of Each Issue, per Inhabitant	
1896	279	335	663	1.00
1897	309	328	732	1.10
1898	349	330	848	1.28
1899	1018	451	3,441	5.18
1900	1076	521	4,278	6.45
1901	1317	637	6,522	9.83
1902	1331	695	7,328	11.04
1903	1319	645	6,860	10.35
1904	1447	637	7,567	11.40
1905	1441	711	8,580	12.92
1906	1536	706	9,262	13.95
1907	1647	724	10,380	15.65
1908	1948	665	11,500	17.33
1909	2041	796	14,690	22.12
1910	2088	820	15,500	23.36
1911	2104	867	17,650	26.60
1912	2476	926	22,080	33.30
1913	2602	958	24,020	36.22
1914	2950	924	28,020	42.25
1915	3270	959	31,700	47.75
1916	3310	1123	38,230	57.65

But neither the dramatic panic of 1907 nor the equally important but less striking "Silent Crisis" of 1914 show the slightest influence in reversing, even momentarily, this growth in activity of advertising. However the passive commercialism of investments may have been discouraged by these crises, they apparently only incited the active commercialists to an increased intensity of effort. Everything tends only to accentuate commercialism.[9]

The New York *Times* also published in January, 1915, some data as to the increase in circulation and advertising of the seven principal dailies published in that city. These figures simply corroborate, from a wider foundation, the showing made in Table 55 from a single paper. The circulation alone of these seven dailies, in aggregate, per thousand people living in the United States, has grown recently at the following rate, namely:

1912, 12.7; 1913, 13.0; 1914, 13.3; 1915, 13.7; 1916, 14.0.

Editorial Favoritism.—It is worthy of particular note that *the editorial and sporting pages of every daily paper, in contrast with all other departments, are usually free from interspersed advertisements*—that combined curse and insult which is handed out to the reader by virtually every daily and weekly journal in the land. The editorial pages are almost wholly free from this blight and shame of modern journalism, and the sporting-pages often entirely so. The jolting contrast between reading and advertising matter closely interwoven, which is so disagreeable to every self-respecting reader of taste, is apparently too much for the personal self-esteem of the editors, who are here (alone of all places in the paper) permitted to assert their personal preferences over the heads of the commercial interests of the paper as a property, subsidized by its advertisers.

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[9] On January 9, 1920, the week-day issue of the New York *Times* disclosed 21.3 per cent of its space devoted to reading-matter and 78.7 per cent consumed in advertising and commercial matter—almost one-fifth and four-fifths respectively. More than that, of the four-fifths devoted to advertising *nearly a fifth was devoted to the advertisement of advertising-mediums.*

There can be no doubt that the *Times* has out "on the road" commercial representatives who are actually engaged in *advertising the Times as an advertising-medium for advertising-mediums!* Then all of this costly triple distillation of commercialism is charged up to the Ultimate Consumer, and collected from him, without his knowledge or consent! For New York's most important facility for the communication of such a fact to the people is the *Times* itself! Without its active, sympathetic aid what hope is there for reform? Who dares to say, then, that commercialism is not cumulative, or that reform rests with the will of the people?

Or is it because the editorial pages are worth less as an advertising-medium, because of the slight popular interest in editorials, that this is so? Or is it that advertisements never appeal to the serious-minded, who alone look at the editorials? At any rate, the readers have to stand it on the other pages, in which they are chiefly interested, but the editors do not. However it may come about, it is an interesting example of that chancy law: "One must draw the line somewhere."

It is also interesting to note that the "sports" apparently will not "stand for" the same imposition. But the general run of readers has no such power of coherent resistance, and must accept the abomination.

Display in General.—It is particularly to be noted, before leaving this topic of advertising, that only one phase out of many, that appearing in periodical literature, has been touched upon here. The vast volume of catalogs, pamphlets, circulars, dodgers, calendars and other printed and expensively lithographed advertising-matter, which is distributed through other channels, has obviously experienced a similar growth. But, except for the inclusion of the data as to the printing and lithographing arts under the heading: "Munitions and Panoply of Commercial Warfare," in Table 28, this cannot be brought under even approximate statistical measurement.

The census for 1910, it is true, gathered data as to manufacturing establishments classified as devoted to "signs and advertising-novelties"; but this was the first instance of this, so that no growth is recorded. Moreover, the figures apply only to the wholesale cost of a minute fraction of all advertising; for the aggregates in the report showed only 288 such establishments, selling their output at a total cost of only fifteen cents per capita of total population. Yet even this fact of almost three hundred factories specializing upon advertising, where a few years ago there were none, is itself significant of the growth of the policy of advertising.[10]

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[10] The telephone-directory for New York City for 1920 reveals between fifteen hundred and two thousand advertising-agencies, for this one city. Many of these names are all but lost between the jostling *advertisements of advertisers.* This shows a tremendous growth since 1910.

The great street advertising-medium of the present day is electric light, both in its use for electric signs and its much wider employment for mere display of brilliant illumination. There is scarcely any single industry which has contributed so much toward the growth of commercialism, or whose own growth measures that of commercialism, as that of electric lighting; yet this measure, concerning chiefly cost for coal and electrical machinery, but not personnel to any large extent, does not appear in our statistical estimates.

All stores, theaters, and the like rely upon bright light as the very first essential to success in business. In the many negotiative offices demanded for commercial combat light is not relied upon to attract trade, it is true, but it is consumed in large quantities, nevertheless, as an indirect aid in the maintenance of an active commercial correspondence, etc. As a factor in the cost of commercialism the lighting of our office-buildings is no inconsiderable item.

An editorial in the New York *Evening Mail* for October 13, 1917, says:

> "Come across on the ferry some winter evening at six or seven o'clock. You will see one of the great sights of the continent: The great towering mass of skyscrapers ablaze with electricity. It is like an Olympian display of all the jewels of which man ever dreamed, piled together by the hands of Titans. . . . This vast illumination is all made from coal. In the New York skyscrapers are offices most of whose force have gone home at this hour, but all lights are left on until the last employee has left. One of the proprietors of such an office was asked why he thus wasted light. His answer was: 'It goes with the rent.'
>
> "The coal thus burned away in the form of electricity could be used to run freight-trains from the munition-factories of Ohio to the Atlantic seaboard, to drive ocean-liners from New York to France, to feed the steel-mills of Pittsburgh."

But all this waste is due, in the first place, to the idea sown broadcast by commercialism that each person's welfare is dependent only upon his personal bank-account, whereas the factory-system teaches that waste by one hurts all. But, overlooking that, does the editor of the *Mail* dare to argue that, even if this light after working-hours were saved, it would release a single pound of coal for the purposes he names? Because the owner of the building might buy that much less coal, would it release a penny of that money for the good of the nation?

This wasted illumination is one of the many parts of the total cost of commercialism which we are trying to estimate statistically, yet which escapes us. There exist no figures as to its growth. There are data as to the growth of electric central stations (see Table 30) of course, but that is not all of the electric-lighting industry. Much comes from private plants in the basements of hotels and office-buildings. Much of this waste is too recent in its origin to appear yet in our decennial data.

In regard to all this bizarre illumination we may only guess at its proportions, and then remain content to condemn it as a tawdry, childish extravagance. It is not that it may not please many an infantile eye. It is not that we prefer darkness to light. It is that this frantic, crude appeal to the eye for profit's sake is a sensationalism quite unworthy of that degree of general taste and intelligence of which we boast. The light should not be cut off; it should be used in the beautiful and dignified illumination of buildings devoted to the nation's business or pleasure, architecturally on a par with the best which Washington or our World's Fairs have to offer.

Advertising, whether by electric light or otherwise, is now one of the most important of all occupations in the waging of commercial war. Men especially gifted in this line command high salaries. Space prominent in the public eye brings high prices. Much high rent is due to this. Whole corporations are devoted exclusively either to the design, or the placing, or the mailing of advertisements in large quantities.

Yet of all this great and growing business scarcely an atom can appear directly in the statistics available. It is the necessary allowance for this fact which has made it scientifically permissible and imperative to classify occupations somewhat as has been done in "Total *p*," drawing the line between production and commercialism in such a way that justice might best be done to that institutional devil, commercialism.

Manufactures.—In Chapter XVII, concerning aggregate commercialism, it was important to center attention upon figures covering all branches of industry at once. That once done, it now becomes permissible to look here and there at fractions of industry for chance indications. Of these fractions one of the most important is *manufacture,* which forms a topic by itself in the census-reports and thus constitutes one of our most definite, if incomplete, sources of information as to national economic tendencies. Tables 56 and 57 set forth the progress in this field.

TABLE 56

MANUFACTURE IN TERMS OF POPULATION, 1850 TO 1910

Year	Number of Establishments per Million Population	Capital per Inhabitant	Wage-earners per 1000 Population	Wages per Annum		Cost of Materials per Million Inhabitants	Value per Million Inhab.	
				Per Inhabitant	Per Wage-earner		Of Product	Added by Manufacture
1850	5305	$22.98	41.2	$10.22	$247	$23.93	$43.93	$20.00
1860	4455	32.11	41.7	12.05	289	32.82	59.97	27.15
1870	6540	43.94	53.3	16.07	302	51.62	87.79	36.17
1880	5060	55.62	54.5	18.90	347	67.72	107.07	39.35
1890	5645	103.70	67.6	30.04	444	82.00	148.88	66.88
1900	6715	128.50	69.5	30.42	437	96.20	170.28	74.08
1900	2719	117.55	61.8	26.30	426	86.15	149.45	63.30
1905	2581	151.40	65.3	31.16	477	101.50	176.56	75.06
1910	2920	200.30	71.8	37.24	518	132.00	224.70	92.70
1920[11]	(3135)	(341.00)	(83.5)	(52.75)	(630)	(202.00)	(338.00)	(135.00)

[11] Estimates, taking no account of the Great War, but based only upon the previous rate of growth of commercialism.

Should it seem natural that manufactures, which form the basis for such complete statistical report, ought to have been made the first foundation for our contrast between production and commercialism, it need only be pointed out, in reply, that all of the data regarding manufactures appear—and necessarily so—in *dollars.* But since it is a first requisite, in defining this contrast, to get away from the dollar, because it is a varying measure, and to consider only actual human energy, it has obviously been necessary to pass by all this alluring mass of data as to wages, produce, etc., until the actual purchasing-power of the dollar had been measured—first by counting heads, and then by estimating the character of the exertion. Now that this has been done, these statistics in terms of dollars may be taken up as of incidental interest.

In all these tables regarding manufacture the double values for the year 1900 are due to the fact that in that year the census-bureau altered its system of classifying manufacturing-establishments, shutting out many of the very small ones which had been included since 1850. But, by altering from the earlier to the later standard of comparison, in passing 1900, the tables show truly the tendencies in both periods.

TABLE 57

MANUFACTURE: RELATIVE TENDENCIES, 1850 TO 1910

Year	Capital				Value Added per $1 Wages	Wage-earners per Establishment	Rate of Growth: Per cent Per Decade
	Per Establishment	Per Inhabitant	Per Wage-earner	Per $1 of Wages			
1850	$4,330	$22.98	$557	$2.25	$1.96	7.77	....
1860	7,200	32.11	771	2.66	2.25	9.34	20
1870	6,745	43.94	825	2.73	2.25	8.15	−13
1880	11,000	55.62	1020	2.94	2.08	10.77	32
1890	18,350	103.70	1533	3.45	2.23	11.97	11
1900	19,130	128.50	1848	4.22	2.44	10.37	−13
1900	43,260	117.55	1904	4.47	2.41	22.7	....
1905	58,600	151.40	2318	4.86	2.41	25.3	23
1910	68,650	200.30	2787	5.38	2.47	24.6	− 6

Thus, by assuming that the growth recorded since 1900 applies equally to small and large establishments, which appears to be true, the ratios of progress can be made continuous from 1850 to the present time. In this way the alteration in average size of establishment during the sixty years is made visible in the last column of Table 57. Discounting the fact that three times a reversal of growth is recorded—once during the decade of the Civil War, again during the decade preceding the Spanish War and comprising the panic of 1895, and a third time during the half-decade comprising the panic of 1907—the average rate of growth in size of factory, for the entire period from 1850 to 1910, has amounted to about seven per cent per decade.

Centralization or Decentralization.—The fact first to be noted in Table 56 is the obvious lack of any *centralization of industry* with time, as would be revealed by the second column if it had occurred. *The number of establishments per million of population has remained virtually constant throughout the last sixty years. If there has been any variation it has been in the way of an increase in number per capita, or in the direction of decentralization of industry.*

The data cannot be doubted. Two of the intermediate decades, it is true—1860 and 1880—show a temporary retrogression; but it is temporary only. That for 1860 may be due to a deficient registration. That for 1880 may be due to the panic of 1873, from which the country recovered slowly. But by 1870 that wonderful outburst of industry and commerce in the North which began in 1863 and 1864 had brought the number of manufacturing-establishments per inhabitant almost to the maximum reached only in 1900.

The figures for 1900 are the highest of any of the previous decades, under the same classification. *Yet those for 1910 are some eight per cent higher still than those for 1900, under the same classification.*

Taking the figures just as they stand, the general tendency, averaged over the sixty years, consists of a 5¼ *per cent increase per decade in number of manufacturing establishments per capita of population*—4.8 per cent previously to 1900, and 7.4 per cent per decade since then. Yet the change in classification in the year 1900 was certainly such as to minimize this showing. The later classification, as shown both by the second column of Table 56 and the second and seventh columns of Table 57, excludes many smaller establishments which in earlier years had been deemed worthy of inclusion. If the classification had remained unchanged in 1900 the record of a steady decentralization of industry would have been still more marked.[12]

The importance of these facts, in their bearing upon current legislation and economic ideas, cannot be too strongly emphasized. According to these statistics the present almost universal belief throughout America—the national economic faith, one might say—in a general trend toward the consolidation of industry into a few centralized "trusts" or monopolies, is not supported by the historical facts in any slightest degree! *Whatever may be the explanation of our growing social ills, the one thing certain is that we are not suffering at all from growing monopoly, but from a quite appreciable growth in directly the opposite direction, namely, toward a steady decentralization of industry into commercial anarchy.*

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[12] For the even more exaggerated decentralization of the banking industry, see page 112.

It is this national faith which has led us in the past (in 1890) into the passage of the federal statute against virtual monopoly called the Sherman anti-trust law. This law has formed the foundation for numerous costly governmental suits against the larger corporations since then, in a futile attempt to enforce it; it has never been of the slightest use for the protection of the people against rising prices; yet it still animates most of the current editorials relating to economic injustice. Yet it possesses not a hair of support in the most accessible facts of American history!

It is this national faith which, in the minds of the Democratic party, justifies its attitude upon the tariff. It is this belief which, in the minds of the Socialists, warrants their hopes for an ultimate transfer of these centralized industries to the control of the workingmen. Yet this belief is not warranted by any statistical foundation whatever.

Indeed, this present book has been written primarily to emphasize the fact—obvious to any who care to inquire—that our great national, or international, danger lies *in the trend of affairs exactly in the opposite direction from that guarded against so zealously by the Sherman anti-trust law, namely, the continuous, rapid and accelerating decentralization of all industry.* For that is the process which has been characteristic of our recent economic evolution. This decentralization is due, of course, to the constant flood of new, infantile industries born of invention.

Since a mere glance at the census-reports is all that is needed to settle these facts, it is impossible to understand how so erroneous an idea has obtained such wide prevalence throughout an intelligent population. Our editors must have been doing some crass jumping at conclusions, merely because they saw consolidations occurring about them. There must be some basic fault in our sources of politico-economic science, that this basic error of editors and politicians was not rebuked out of existence, years ago, by the universities.

But the support for this fact of decentralization need not be confined to data relating only to manufactures. It is corroborated broadly by the figures as to the number of business-concerns in general, as reported by Bradstreet. The basis upon which these concerns listed in Table 58 were selected by Bradstreet cannot be stated, but it naturally would not include the many very small ones. But since *relative direction of growth,* rather than absolute quantities, is all that is desired here, this is of no consequence, so long as the classification remains unchanged.

TABLE 58

Number of Business Concerns (per Ten Thousand Inhabitants)

1881	152	1887	158	1893	158	1899	150	1905	162	1911	175
1882	156	1888	158	1894	153	1900	152	1906	164	1912	175
1883	158	1889	159	1895	151	1901	155	1907	166	1913	176
1884	158	1890	157	1896	152	1902	156	1908	168	1914	176
1885	157	1891	158	1897	150	1903	158	1909	171	1915	175
1886	159	1892	158	1898	149	1904	159	1910	173	1916	174

Table 58 gives the variation in number of such concerns per ten thousand inhabitants over the last thirty-five years. Up to the year 1900 the number of business-concerns per capita, while not showing any increase, plainly shows no decrease at all. Yet the popular clamor against "the trusts," which had been sufficient, even so early as 1890, to secure the enactment of a federal statute, would indicate that there must have been a very great decrease in number—meaning an increase in centralization.

Since 1900, according to Bradstreet's data, business has been undergoing a fairly steady process of decentralization, at the rate of an 8.8 per cent increase in number of business-concerns per capita per decade. Indeed, during the period from 1899 until 1911 this decentralization of industry was maintained at *an average rate of nearly 14 per cent increase in number of concerns per capita per decade. Yet this was just the period when was inaugurated that national policy of consolidation of concerns and expansion of capitalizations at such an astonishing rate as to alarm even Russell Sage!*

Decentralization Our Real Problem.—This certainly does not look as if a centralization of industry were proceeding at such a rate as to endanger the liberties of the people, warranting legislation as drastic and litigation as costly as has been that of the Sherman anti-trust law. Indeed, the truth is the exact opposite of that. Our statistics, including Tables 27 and 28, show that it is *decentralization* which is occurring so steadily, even if not rapidly, as to promise soon a critical stage in that direction. If decentralization is what the people really need (which it is not) then *they are now getting it automatically, without the aid of any legislation—or in spite of what is already enacted—at such a rate that, if nothing intervenes before then to disturb present rates and directions of growth, the number of concerns in competition, per capita, promises to have doubled in less than two generations!*

Industry, of course, is unquestionably undergoing continual consolidation. That is to say, individual concerns are consolidating. If we permit ourselves to be misled by the quite gratuitous and childish assumption that there are always a constant number of such individual enterprises in existence, awaiting consolidation—or, in other words, that no new enterprises ever are formed—then of course the inevitable result of consolidation would be centralization.

But plainly this assumption may not be taken seriously. New business-enterprises are continually being undertaken, and in large numbers. If, while any given consolidation is being effected, *more new enterprises are started than were absorbed in the consolidation,* then the result must be the exact opposite of centralization. This is obviously the process which has underlain all our recent and current economic evolution.

It is particularly worthy of note that business-concerns in general are decentralizing more rapidly than are the factories. Whereas the factories are increasing in number per capita at the average rate of 5.25 per cent per decade, business-concerns in general (including possibly some factories with the more purely commercial concerns) are growing at the rate of 8.80 per cent, or two-thirds as rapidly again. That is to say, while invention is increasing the decentralization of all sorts of industro-commercial enterprise, it is affecting the commercial side of the field much more rapidly than it is the productive side. This fact is in line with all others which have been quoted herein to show the continual diversion of the good latent within invention into commercial combat, rather than its conservation for increasing production, and its loss thereby in economic dissipation.

Decentralization in Series and in Parallel.—The trouble resultant from this constantly invading host of new combative enterprises, it is to be noted, is not primarily that it develops too many steps *in series* between producer and Ultimate Consumer, as is now so frequently complained, but that there are now too many middlemen *in parallel,* side by side, at each step. It is doubtful if even an ideal, unitary administration of all industry upon a complete factory-system would reduce the number of successive steps very far below what they are now. But while there are probably not over two or three times too many steps in series—in the most favorable cases, at least—there are often *ten or twentyfold too many men in parallel at each of these steps.*

The High Cost of Buying.—It is the deadly doubt which must arise at each of the many sales and purchases as to which is the man, and what the proper price, and what the mysteriously shrouded quality, which is eating the substance out of this rich country. It is the lack of opportunity to know that there is but one man to whom to go, and but one price to be had wherever one might go, and only standardized qualities, with price proportioned to cost—which wastes all the time, money, energy and courage of the people. *The prime poverty from which this ultra-rich nation now suffers is its lack of monopoly—of monopoly owned by the Ultimate Consumer.*

For instance, an inspection of the volumes of evidence taken recently before the New York Food Commission, in protest against the rising cost of living, reveals everywhere the effort of the Commission to uncover, as the suspected cause of high prices, two alleged evils, namely, *(1) unnecessary transportation, and (2) monopoly.* Yet the evidence failed to sustain either of these hypotheses. Much unnecessary transportation was shown to exist, it is true; but it was also shown that this factor was quite inadequate as an explanation of more than a small fraction of the increase in prices. Partial monopoly was also shown to exist in some cases, but there was complete lack of evidence that it elevated prices any higher, if so high, as did competition.

Apparently there was never a suspicion on the part of the Commission, although there was plenty of evidence, that it was the *lack of monopoly* at every step in the many transfers which so multiplied the cost of each. Nothing is so expensive as commercial competition. Nothing is so efficient as monopoly, if properly handled.

Growth of Factories in Size.—To return to the statistics of manufacture, it is true that the average size of establishment, whether measured in personnel or in capital, is steadily increasing. Yet even in the former respect it is not so rapid as is usually imagined, being in 1900 only 33 per cent and 1910 only about 45 per cent greater than in 1850, the era of hand-cut nails and bench-made shoes.

While the largest factory is steadily becoming larger, yet the smallest size of factory continues to be fully represented in larger and larger numbers. The newcomers are virtually all of the smallest size listed. We are acquiring our big factories and other business concerns in the same manner as we are acquiring our big cities and our big personalities, namely, by the unchecked growth of individuals *all of whom were born infants.* The continual influx of newborn infants, by its increasing numbers, keeps down the averages in spite of the growth of all at once.

For in the growth of cities or factories the old and big do not die off, at a certain point, as they do among people. Just as, in Tables 16 to 19, we saw how the population living in cities kept itself about even divided between the several sizes of city, *in spite of the constant growth of every city in the land,* and especially of the larger cities, so, in industry or business, the population at work keeps itself about equally divided between the various sizes of factory or other concern, *in spite of continual consolidation.*

It even tends toward a scattering decentralization. If the few factories are much larger, there is also a larger number of the very small, and particularly of new selling-offices. Table 56 shows that, even in comparison with the relatively enormous population of to-day, the number of manufacturing-establishments per capita had actually become 26 per cent greater in 1900, and 36 per cent greater in 1910, than in 1850, which was peculiarly the era, apparently, of sparse population and very small, unconsolidated factories.

The lessons of Tables 56 and 57 will be more obvious if drawn from Table 59, which gives the same data translated into relative rates of growth, in terms of 100 for 1850. From Table 59 it becomes obvious that nothing about manufacturing industry has grown so rapidly as has *capital per capita of total population.* This to-day doubtless exceeds by tenfold that of 1850, since by 1910 it had grown to well over ninefold.

In comparison or contrast with this, capital-per-establishment —which is really what is back of the discontent which created the Sherman anti-trust law (although its advocates dream that it is monopoly which played that rôle)—has increased only some six hundred per cent. Capital per wage-earner, which is the basis for orthodox socialism, has increased only about four hundred per cent. Indeed, capital per dollar of wage has increased only about 150 per cent. "Value added" per dollar of wage, which is what is back of the I. W. W. philosophy, has increased only 26 per cent in the sixty years.

TABLE 59

RELATIVE RATES OF GROWTH IN MANUFACTURE, 1850 TO 1910

Year	Wage-earners per Establishment	Capital per				Establishments per Million of Population	"Value Added" per Dollar of Wage
		Establishment	Inhabitant	Wage-earner	Dollar of Wage		
1850	100	100	100	100	100	100	100
1860	120	166	140	138	118	84	115
1870	105	156	191	148	121	123	115
1880	138	254	242	183	131	95	108
1890	153	424	451	275	153	106	114
1900	133	442	559	332	187	126	124
1900	292	442	559	342	199	126	123
1905	326	599	720	416	216	120	123
1910	317	701	952	500	239	136	126

But the thing particularly to be noted by the conservative reader, of whatever school, is that the marked characteristic of the last sixty years of progress has been *the enormous increase in capitalism in proportion to any basis of reference whatever.* The thing to be noted by the radical on the other hand, is that it is when the basis of reference is the *individual citizen,* without any reference to whether he be a wage-earner or what, that the unbalanced growth of capitalism becomes most disproportionate and topheavy. For the socialists lay all their stress upon the question of wage-earners vs. wage-payers—a distinction which will increasingly be proven, as this analysis proceeds, to be irrelevant and futile.

Growth of the Harvester Trust.—As an illustration of a single industry which has undergone that consolidation which is so much in the public mind, Table 60 displays the past progress in the manufacture of agricultural implements, which finally resulted in what is known as "the harvester trust." Here is visible the steady and rapid decrease in the number of factories, in proportion to population, the slow decrease in the number of wage-earners, and the rapid increase in capitalization in the face of these decreases, while the value of output remains fairly constant.

TABLE 60

AGRICULTURAL IMPLEMENTS, 1870 TO 1910

Year	Number of Establishments per Million Inhabitants	Wage-earners per Million Inhabitants	Value Added, per Thousand Inhabitants	Capitalization	
				Per Thousand Inhabitants	Per $1 of Value Added
1870	53.8	654	$13,500	$9,030	$0.67
1880	38.7	789	13,680	12,380	0.90
1890	14.4	617	12,900	23,100	1.71
1900	9.4	597	13,270	20,670	1.56
1905	7.7	566	13,380	23,500	1.76
1910	7.0	549	15,900	27,860	1.75

This last fact becomes luminous with explanation when one meets the common defense of capitalism, namely, that the latter is harmless so long as it represents no more than the value of the plant. The trouble is that, *under commercialism, the valuation of the plant, that of the output and that of the capitalization, must all keep pace with one another,* under that law of commercial equilibrium which we have quoted from Professor Fisher and the meaning of which we have tried to make clear. This law is that the valuation of the plant (and hence its capitalization) is fixed by the valuation of the output; and further that this last is always the maximum which the traffic in that particular line will bear. While variation away from this law may be observed in some one plant, for the entire land and for most individual plants it holds true.

Particular Manufactures.—The growth of commercialism is also shown indirectly by the relatively rapid rate of growth of certain manufacturing industries, particularly those classed under *l* or *m* in Table 28, as compared with the average rate; but from any attempt to estimate the growth of commercialism in this way we are forced to exclude many industries most closely related to commercialism, such as typewriters, electric light, etc., because they are of too recent an origin to have a history safely comparable with the gradual growth of commercialism. Thus full justice cannot be done to the subject.

Nevertheless Table 61, giving the relative growth of some of these particular manufactures, in comparison with the average growth of all manufacture, is submitted, as being significant, so far as it goes. The figures are stated in terms of market-value of output in proportion to population, because for this purpose the varying unit of measurement, the dollar, obviously has the same value for all industries at any one time. The figures for 1905 and 1910 are based upon the assumption that the rate of growth has not been affected by the change in classification in 1900.

Of the industries tabulated, some are shown because they indicate positively the growth of commercialism, some because they do so negatively, and some as merely of general interest. Thus "printing and publishing" has not grown even so fast as the average for all manufactures; yet "newspapers and periodicals," which is merely one portion of "printing and publishing," has grown more than half as fast again—an indication of the relative profitableness of advertising, under the commercial warfare system.

Again, "women's clothing" shows a phenomenal growth—over four times the average; yet this has only a partial bearing upon the growth of commercialism, because this industry is one of those which has been shifting steadily throughout the fifty years from the home, where it was unenumerated, to the factory, where it was so. Yet in part, also, this tremendous growth indicates woman's prerogative of spending upon her personal adornment—in "vicarious display," to use Professor Veblen's term—much of the large unearned incomes which are characteristic of the later decades of commercialism. The growth of some of these industries which are grouped with women's clothing also shows a replacement of earlier importations from abroad by domestic manufacture.

TABLE 61

MANUFACTURE—RATE OF INCREASE IN VALUE OF OUTPUT OF PARTICULAR INDUSTRIES, PER CAPITA, 1860 TO 1910[13]

	1860	1870	1880	1890	1900	1905	1910
All Industries	100	103	178	248	284	335	427
Newspapers and Periodicals	...	103	212	447	475	578	692
Printing and Publishing	...	...	178	218	226	294	399
Women's Clothing	100	147	279	474	914	1295	1830
Millinery and Lace Goods	...	103	117	175	236	370	570
Buttons	100	152	294	222	334	440	818
Artificial Flowers and Feathers	100	76	290	430	246	...	778
Perfumery and Cosmetics	100	135	113	189	239	341	398
Soda Fountain and Supplies	...	103	82	199	250	309	439
Men's Furnishings	...	...	178	369	453	455	708
Cigars and Cigarettes	100	299	441	712	724	882	978
Distilled and Malt Liquors	100	156	186	194	286	335	412
Scales and Balances	100	178	158	89	167	174	232
Labels and Tags	...	...	178	172	150	304	525
Paper Bags	...	103	220	214	239	323	457
Fancy and Paper Boxes	100	282	413	807	967	1189	1600
Wooden Packing-boxes	100	377	410	657	810	1084	1326
Envelopes	100	324	246	317	340	502	602
Gas	100	217	...	287	260	391	474
Gas and Electric Fixtures	100	147	120	173	210	292	452
Carriages, Wagons and Automobiles	100	151	124	167	165	196	392

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[13] Where an industry lacks data extending back as far as 1860 its rate of increase is figured by starting at its earliest date with the figure for "All Industries" for that year.

No indulgence of womankind in dress or confections has grown any faster than has man's use of tobacco—if it can be called exclusively man's any longer. Alcoholic liquors, while growing more slowly than tobacco, still show a fourfold consumption, as measured in price, *in spite of the marked growth of prohibition sentiment.* Those territories which are still "wet" are plainly expanding their consumption of alcohol at a rate sufficient to overtop the cessation of its use in the "dry" territories.

The growth in number of retail purchases is indicated roughly by the data as to "scales and balances" and "paper-bags." Both of these are ancillary to the handling of life-supporting commodities; yet neither of them exceeds the general average growth in manufacture, while the former attains only about half the rate.

But when one turns to the features of retail trade or office-business which are indicative of commercial competition, the rapidity of growth again becomes startling. "Labels and tags" have exceeded the average by 23 per cent, "envelopes" by 41 per cent, "wooden packing-boxes" by 210 per cent and "fancy and paper boxes" by 275 per cent.

The great growth of the gas-industry is shown as merely interesting, in spite of the advent of electricity—which last, indeed, has been indirectly instrumental in increasing the use of gas, for cooking, by cultivating a standard of domestic luxury which will no longer cook with wood or coal. "Gas and electric fixtures" is an industry covering the entire fifty years, and includes also the growth of electric lighting; yet it shows a rate of growth only slightly exceeding the average.

The general road-vehicle industry, too, including the development of automobiles up to 1909, is surprising in that it has not kept up with the general average.

Commercialism's Unparalleled Rate of Growth.—It is in contrast with such industries as these, popularly supposed to be without parallel in recent growth, that the still more rapid growth of those things which are peculiar to commercialism appears in its proper light. Whereas manufacture as a whole has grown since 1850 by only 427 per cent, commercialism as a whole, as shown by Tables 45 and 47, has grown by some eight hundred or one thousand per cent. Particular industries which reveal especially the effect of commercialistic influences, such as wooden or paper packing-boxes, or women's clothing, exhibit a growth of from thirteen to eighteen hundred per cent!

The manufactures listed in Table 61 are substantially all of those appearing in the census-reports which show a rate of growth faster than the average—except those which were first introduced after 1869, and which are therefore incapable of expression in the form of a ratio. But this general average for all manufactures, it must be remembered, includes these later novelties, which of course have embodied the highest rates of growth of all, as well as the more slowly growing items.

For any particular industry which has been continuous since 1850, therefore, to have grown as fast as this average for all industries means that it has grown at a rate far beyond that of all permanent industries. Its rate parallels that of all the other permanent industries *averaged in with those novelties which have appeared since 1850 and whose rate, stated mathematically, must be infinite.*

The Modern Efflorescence of Commercialism.—Yet commercialism—mere buying and sellings things which are not wanted for consumption by the buyer, and bargaining, and exacting interest—is one of the oldest institutions known to man. The oldest known human writings are concerned chiefly with its records. Hence to have it now burst forth upon us with the exuberance of youth, as an ancient custom drinking renewed vitality at the fountain of modern invention, and to find it growing upon us at a rate exceeding even those things born since 1850, is a fact to make every serious student of present progress pause for most careful reflection.

Ethics and Social Evolution.—The significant fact proven by all this recent acceleration of the growth of commercialism is that we are *not* curing our economic ills gradually, by our cultivation of the arts, sciences and ethics, as is so commonly alleged. The world is daily becoming more discontented simply because the wrongs which disturb it are growing upon us—with science and ethics both impotent to help us because *neither science nor ethics has been able even to identify the cause of the hurt, let alone cure it.*

Nor are we curing our economic ills by our increasingly radical and vehement protests in the fields of politics, economics and the humanities. For the figures all show that we are to-day becoming enslaved to commercialism at a rate more rapid than ever before in our history. In spite of the fact that we now possess universities, scientific schools, forums, civic clubs and sociological societies to a degree unequaled in our past history, yet all the forces—all the migration of humanity from production to commercial combat, all the relentless accumulation of interest-bearing securities, all the multiplication of new businesses, and all the resultant subconscious wastes, antagonism, brakes and shackles—which are creating the social problem about us, are measurably more powerful and active to-day than ever. Indeed, *these various futile protests grow only in response to this accelerating commercialism, as their helpless consequence, and not at all as a leading or dominant control over commercialism.*

Indicators.—Take as an indicator of the growth of commercialism the increase in inter-communication. It cannot be urged that this is merely an indication of our growth in the circulation of useful intelligence. On the contrary, it is all too common knowledge that the bulk of all mail-matter, the great majority of all telegrams and an overwhelming volume of telephone-messages are used for purely combative commercial purposes. Without denying for an instant the incidental influence of postal, telegraphic and telephonic communication as a help in the guidance of productive industry, general intelligence and domestic comfort, yet it is insisted that this function is obviously quite minor, and not major, in its proportions.

Compare, for instance, the use of the telegraph and telephone by the scientific, educational or technical portions of the community, with that by the commercially combative. Compare the amount of advertising mail-matter which you daily throw into the waste-basket, usually unopened, or the number of letters which concern merely price or ownership, with those bringing you really useful messages. Consider those which support your life in a physical or ethical, as contrasted with a commercial, sense. Compare the space in your periodicals received by mail which is devoted to advertisements, with that devoted to real news of crops, inventions, really novel manufactures, literature, art or science.

The bulk of all mail-matter proceeds from business-offices, is advertising or solicitous or diplomatic or hostile in its character, and finds its way into the waste-basket; or else into the files of some enterprise whose prime function is to annul the first named one. Telegrams and telephones occur chiefly in the commercial district, where they enter the offices in bunches, whereas a college-professor almost has a stroke of apoplexy when he receives a telegram. Over nine-tenths of all mail-matter is a sheer waste of paper, ink, intelligence and transportation; yet in the author's estimated "Total *p*" only half of it was charged as such.

Yet these postal facts, as indicators of the growth of commercialism, cannot easily be brought out in statistical truth. Comparison between first-class and third-class mail, for instance, or between two-cent and one-cent postage, will not help; because the commercialists learned long ago that the one-cent letters usually go into the waste-basket unopened, whereas at least a glance is bestowed upon the two-cent letters. Wherefore advertising-matter travels increasingly by letter-postage—at so much the greater loss to the Consumer.

The Time-factor in Social Evolution.—For all these reasons it becomes the prime lesson of this book, to be reiterated and emphasized at every possible point, that *there is no feature nor function of modern civilization which has grown upon us so steadily throughout the last half-century, nor which is equally accelerating that growth at the present time, with commercialism.* Hence whatever may be relied upon, in the philosophy of any particular reader, for overcoming and curing this evil, it must be set going, in order to be effective, not only very much faster, and with greater energy, than any present line of progress in science, art, technology, charity, politics or even manufacture, now visible. *It must double or treble that maximum rate before it may boast even of keeping even with its quarry, to say nothing of overtaking and reversing it!*

Time, *time,* TIME—is the all-important function in the effectiveness of any line of reform. Whatever remedy does not proceed faster than the disease is no remedy at all. It is worse than nothing; it is a loss. For it allows the situation to get worse while losing us our present opportunity to do something effective for good. There is nothing more mischievous in our social activities than the loss of time, through mistaken zeal in the many inadequate reforms now before the public.

In all this we are *not* being aided by general progress in knowledge and ethics, as is so commonly supposed. These factors, indeed, are busily engaged only in making the situation worse. Just as international militarism has been expanded by modern invention into something far bigger and more destructive than ever before known, so that the latest war is always the worst in history, so is the effect of technical advance upon commercial militarism quite the same. Indeed, it is just as our theological universities of 1850 have been melting into our schools of natural science and technology of 1920 that the economic problem has grown into a menace to civilization the magnitude of which defies the intellect and appalls the imagination.

That, indeed, is our real problem. What effective remedial agent can we bring to bear upon an evil, such as commercialism, which has appropriated, absorbed and grown upon every atom of intellectual advance hitherto accomplished by man? We cannot fight fire with oil. If we still hope to overcome by pacific persuasion, by legislation, or by gradual reform of any kind, the most gigantic, rapid and energetic of all modern institutions of progress—commercialism—we are plainly forced to rely upon some force or process never yet suggested nor made available. Therefore the responsibility of anyone who dares to cling to that unfounded hope, to bring forward and apply such novel force or policy, is a very heavy one indeed.

For every line or policy of advance hitherto known to man has had for its effect only the acceleration, rather than the arrest, of commercialism, and its further escape beyond our control. Every step of our progress in science, technology or even ethics is now actually absorbed in feeding and accelerating the growth of commercialism, rather than braking or starving or opposing it into any semblance of subjugation. That is why, indeed, this ancient institution, which we have had with us since the earliest dawn of history, has only recently taken on this sudden leap into the dominating institution of present history—because *never before in history have we had a parallel supply of political liberty, technical aids and popular knowledge upon which such growth might feed.*

He who cannot grasp the significance of this great fact has not yet taken his first kindergarten step in the understanding of the problems of the day.

CHAPTER XIX

THE COST OF LIVING

Voluminous and puzzling as are the statistics of wages in their mass of detail, those of the prices of commodities are still more so. Hardly any topic in political economy has received more attention than prices. Few deserve it more. For the whole question of the contentedness or discontent of the people rests primarily upon this basis.

For the thing of vital importance to the ordinary citizen is not the wage or salary itself, as measured in dollars, *but its purchasing-power.* It is the *relation* of wages to prices, and not the absolute position of either, which counts.

Yet it is queer how incomprehensible to the average intelligent workingman or socialist seems to be the fact that wages are not paid in dollars, but in food, clothing, etc. Labor presses continually for a higher money-wage, dissipating enormous amounts of energy and time in organizing itself for that purpose, quite dense to the simple fact that *the higher are wages, in general, the less they buy.*

Startling as the words may seem, it is nevertheless true that labor is best off when the general rate of wages is low; for then they buy the most. When the clouds of the ancient conflict between labor and capital shall have finally rolled away forever, in an ultimate peace which secures to labor the full value of what it produces, then wages will surely be much lower than they are now; but they will then buy much more than now.

The question of the cost of living therefore resolves itself immediately into two quite distinct and independent questions: First the preliminary inquiry, how and why have prices varied absolutely speaking? Secondly, what is the relative variation between prices and wages, or vice versa, and the reason?

A first inspection of the information available as to prices leads one to conclude, with Mulhall, that "wages often rise when prices fall, and vice versa." But this fact is soon found not to represent any general law, but merely the sensitiveness of the economic situation to many contending forces, which sway prices back and forth momentarily, so to speak, in one direction or the other.

The general law is that *prices always rise with, and faster than, wages.* But the relative adjustment of the two requires time, and before it can be accomplished other influences often interfere to disguise the law. But they can never annul it. In any event, the first task must be to set forth the facts as to the variations of prices in the past, as a basis for the investigation of causes.

The History of Prices.—Each economist who takes up the problem of prices, and attempts to discover some satisfactory scale by which to measure and tabulate their variations, expresses his sense of the impossibility of the task. The data may be never so complete. The problem is to classify them; and this problem varies with each different object in view.

For instance, the prices which are of prime interest to the Ultimate Consumer are those of finished and delivered food, clothing, shelter and recreation. Those of first interest to the manufacturer, on the other hand, are the prices of comparatively raw materials, such as lumber, coal, iron, etc., or of raw grain, wool, cotton, etc. These separate classes of goods do not always vary in price together. Thus Mulhall in his "History of Prices" (1885) gives the data appearing in Table 62.

TABLE 62

RELATIVE VARIATION IN PRICES OF AGRICULTURAL AND MANUFACTURED COMMODITIES, 1841 TO 1884

Year	Agriculture	Manufactures
1841–1850	100	100
1851–1860	116	91
1861–1870	121	99
1871–1880	117	92
1881–1884	111	75

The Price-Index.—But if one is to gage accurately the varying welfare of the Ultimate Consumer he must have some index of the varying price of the aggregate of that Consumer's purchases; and the list of commodities bought of course varies with each class of Consumer. Even if the attempt be made to lump all Consumers together, by averaging the prices of many commodities into a single index-number, difficulty still arises. A whole literature exists upon the question: "What is an index-number," or "what should it be?"

Mulhall, for instance, objects strenuously to the "unweighted" averaging of prices, pointing out pertinently that a drop of ten per cent in price of wheat and a simultaneous rise of ten per cent in price of pepper cannot be taken as offsetting each other, as in an average, to show unchanged welfare of the Ultimate Consumer. But if the prices are to be weighted in averaging, how do it? Mulhall weights them in terms of the volume of trade through the custom-house; but this seems equally far from the point, since the imports and exports are no measure of the volume of home-consumption, which is the thing of importance.

Most of the statisticians openly dodge the issue, by recognizing the limitations of the unweighted index, yet accepting it as the best measure available; and in this the author will follow them, since there is no pretense here of adducing anything original in the statistics of prices. If one looks at the problem sufficiently broadly, covering enough time at a glance, attending only to major issues and not expecting too great accuracy in detail, certainly some broad conclusions which are not now generally recognized may be reached with safety.

As a foundation for such an analysis Table 63 presents index-numbers showing the relative variation of wages and prices in parallel, all based upon 100 for the year 1900 as a standard of comparison. The index of wages is taken from Fig. 2 of this work. Those for prices are drawn from various authorities as follows:

Column 2: English Prices: Layton:[1] "The study of Prices," quoting Jevons & Sauerbeck's index-number;
" 3: " " Mulhall: "The History of Prices";
" 4: " " Layton, quoting the London *Economist;*
" 5: " " Fisher:[2] "The Rate of Interest";
" 6: German " "
" 7: French " "
" 8: American " "
" 9: " " Aldrich Report;
" 10: " " *Bradstreet's Journal.*

[1] Professor at Cambridge, England, and University College, London.
[2] Professor at Yale.

Table 63, admittedly questionable in its basis, yet composed of the best materials available, stands as a symbol of the worth and unworth of certain sorts of statistics. Its prime value must be found, if anywhere, in Column 11, giving the ratio of price-index to wage-index.

TABLE 63

Relative Variation in Wages and Prices, 1800 to 1915 (1900 = 100)

Period	Wages	Prices									Ratio of Prices to Wages
		English				Ger.	French	American			
	1	2	3	4	5	6	7	8	9	10	11
1800–1805	69	213	194	.....	.....	.....	.....	.....	.....	...	(English) 3.00
1806–1810	74	235		.....	.....	.....	.....	.....	.....	...	
1811–1815	78	199	195	.....	.....	.....	.....	.....	.....	...	2.40
1816–1820	77	185		.....	.....	.....	.....	.....	.....	...	
1821–1825	73	154	132	.....	154	.....	.....	.....	.....	...	1.99
1826–1830	70	140		.....	135	.....	.....	.....	.....	...	
1831–1835	67	131	124	.....	125	.....	.....	.....	.....	...	2.03
1836–1840	64	144		.....	139	.....	.....	.....	.....	...	(American)
1841–1845	65	125	112	.....	120	.....	.....	97	.....	.....	1.49
1846–1850	69	116		100	112	.....	.....	98	.....	.....	1.42
1851–1855	74	122	117	108	121	102	.....	112	.....	.....	1.51
1856–1860	79	133		123	131	110	.....	117	.....	.....	1.48
1861–1865	84	136	124	157	136	112	136	132	120	.....	1.50
1866–1870	78	132		124	132	112	116	180	135	.....	2.02
1871–1875	93	138	118	129	137	121	112	142	134	.....	1.48
1876–1880	95	119		112	119	112	86	117	114	.....	1.23
1881–1885	93	106	106	101	107	107	84	113	114	.....	1.22
1886–1890	91	95	.....	99	94	95	87	103	103	.....	1.13
1891–1895	92	89	.....	93	86	91	.....	93	93	94	1.02
1896–1900	97	87	.....	91	88	90	.....	89	88	86	0.91
1901–1905	103	93	.....	102	93	94	.....	103	103	100	0.99
1906–1910	108	102	.....	108	103	.....	.....	112	114	107	1.02
1911–1915	118	.....	.....	.....	.....	.....	.....	.....	.....	122	1.03

The absolute value of this ratio, at any one time, of course indicates nothing. But the *variation* of this ratio with time should certainly follow and reveal the known variations in economic contentedness among the working classes. To a degree it does this; but there are lacks.

The table opens just before the zenith of the stormy Napoleonic era, when prices were higher than ever since, and wages were the highest for a quarter-century before or after. So it is not surprising to find the ratio of Column 11 at its highest value at this time.

But from that date forward relative peace reigned over both Europe and America, and its natural influence upon prices and ease of living is visible in the continuous drop of the ratio until about the year 1850. From that time until about 1870 war held sway in both continents, with the result that within the twenty years the ratio rose from 1.42 to 2.02.

Then came another era of comparative peace, lasting until almost the close of the nineteenth century, resulting in a drop of the ratio to 0.91. Since that time both martial war and commercial combat have been in the ascendancy, and the ratio has risen in consequence to 1.03, or by 13 per cent in fifteen years.

General Principles of Price-Determination.—But before these relationships can be traced in proper detail we must pause to review briefly the factors determinant of the general level of prices—a topic now more widely misunderstood than almost any other in political economy. For it is all but universally assumed that the whole question rests only upon the law of supply and demand—that there is inherent in humanity a general reluctance to produce, which forces supplies down and prices up until the higher price persuades additional productivity to come into action. Conversely (it is supposed) the higher price is always competent to force into action the desired increase in productivity.

It is puzzling to the author to understand whence arose this simple and inadequate theory of prices. There is certainly not an atom of support for it in our general statistical data. There is very little even in the vague surmises of daily life. For, however the reader may have observed in his own experience a working of the law of supply and demand, to determine the price of any one commodity in which he happens to be interested, in comparison with other commodities—as of the price of cotton rising while that of bricks is falling—any study of the general level of prices will force out of one the last vestige of reliance upon supply and demand as their determinant. The whole economic history of America forces one to the conclusion that either there is no such law, or else that some superior force has annulled its free operation.

If so, what are the major forces which determine the general level of prices of all commodities, averaged together?

Let us first debate the distinction between what we may call the internal factors controlling prices—that is to say, those operative within the organization which publishes any given price to the world—and those factors which are external to that organization, and which coerce it. These internal factors are listed in Table 64.

It is obvious from Table 64 that, in the determination of the general price-level prevailing at any given time, and particularly in the progress of prices with time, there is a certain degree of "working in a circle" between these internal factors and the external ones—a mutual reaction between the price of each single commodity and all the rest. That is to say, high prices beget high prices, and vice versa.

TABLE 64

THE INTERNAL FACTORS IN PRICE DETERMINATION

(*A*) Productive Costs:	(1) Plant and Materials; (2) Wages and Salaries of Producers	←
(*B*) Commercial Costs:	(3) Interest, Dividends, Rent, etc.; (4) Salaries of Commercial Combatants and the Wages of their Aides; (5) Costs of Selling; (6) Surplus.	
Total.........	Prices →	

This much is now commonly understood; but it does not solve the riddle. What still remains to be explained is: What are the forces, and where within this magic circle do they originate, which leads *at one time to the begetting by high prices of still higher prices, and at another time to the begetting by low prices of still lower ones?*

Now that every commercialist is explaining his prices as forced upon him by someone else's prices, it is not as clearly understood as it should be that any factor, in order to be competent to raise prices already high, or to depress prices already low, *must* be something aside from and independent of the mere effect of prices upon prices. That reaction certainly can tend neither to raise nor depress prices. Indeed, it is, even to-day, our greatest stabilizer of prices.

Indeed, what is not properly understood to-day is that it is the operation of this very stabilizing effect of prices upon prices which prevents, in co-operation with other natural, biologic counterbalances, the spasmodic elevation or depression of prices by mere individual whim or greed. For the occurrence of such individual peculiarities is always sporadic; and for centuries we have had at work nature's counterbalances to individual idiosyncrasies.

Nor may we sweep the topic easily aside by saying that the raising of prices may become epidemic, by mob-action. That is no answer, because men have always been greedy to raise prices. Why, in the face of that eternal fact, has history recorded periods when whatever epidemic action was at work led to a universal reduction of prices, and other periods, as the present one, when it has led to the exact opposite? For, in past history, prices have fallen as many times as they have risen.

What we must find to-day, before we may pretend to ourselves that we understand the political economy of prices, is some factor sufficiently powerful and non-individual to be able to defy all these natural, stabilizing counterbalances to individual peculiarities, over wide stretches of territory and population simultaneously, and sufficiently primal to be able to originate, in the face of all these tendencies of prices to remain fixed, a motive force adequate to set in motion an entire civilization.

Therefore it is of the utmost importance that we examine carefully this distinction between these two sorts of factor in price-determination—the external and the internal—in order to discern clearly primal action from mere reaction. We must carefully avoid jumping at conclusions. The wisdom or futility of much of our crusade against high prices depends upon this.

The Effect of Prices upon Prices.—Table 64 supplies us with our first material for a clear understanding of price-factors. It divides the internal factors into two main classes—productive costs and commercial costs respectively—subdivides these main classes into six subclasses, and then localizes among these subclasses the field of reaction of prices upon prices. The habitat of the "vicious circle" in prices then is defined by the arrows.

Thus, taking up the subclasses seriatim, it is plain that the price of raw material must rise with the prices of factory-output, and vice versa; for what is one factory's output is the next factory's raw material. If a factory discharges only partially completed commodities, which serve directly as the raw material for the next step in their transformation into life-support, then this relationship is direct and obvious. If the factory's output be stuff finished for ultimate consumption, then this influence is less direct—taking effect only through the intermediaries first of cost of living, and then of wages—but it is none the less certain for that fact.

Thus, eliminating for the moment all questions of external factors which may affect the price-influence during its traversal of the path of the arrows in Table 64, and all question of delay or "lag" involved in this transit, it becomes plain that prices themselves can neither elevate nor depress the purchasing-power of wages in general, and hence the general contentedness or discontent of the people. Prices may be high or low. If nothing else has altered, wages and salaries will have gone with them, and purchasing-powers have remained undisturbed. However wages may have risen or fallen, the only true wage—that in terms of life-supporting commodities—has remained unaltered.

So much for the effect of prices upon the purchasing-power of wages.

The Effect of Wages upon Prices.—Now being a period when both wages and prices are rising rapidly—wages being forced upwards by drastic, uncomfortable strikes, and prices by forces no less tyrannous and brutal because better cloaked—it is common to aver that prices are being forced upwards by the rise in wages. Not only has this doctrine already been disposed of, by our observation that there is no motive power in this simple reaction of lifting oneself by one's boot-straps; but there is a twofold reply to it in addition.

First, our statistical tables show that the commercial interests of the country, taken as a whole, are to-day paying out *a smaller fraction of their gross income in productive wages than ever before in our history;* wherefore the wage-argument, so far as it may have any force at all, must find expression in a gradual depression of prices. They are not conscious of this fact, because they think that all the wages they pay are productive. But the real trouble is that more and more of the wages they pay are non-productive wages, paid to those whom they hire to help them fight.

Secondly, as wages and prices have risen together, of late, *prices have always risen faster than wages.*

Thus, for an instance of the latter fact which has been staring us New Yorkers in the face as we rode (for no one can afford to run nowadays) the bulletins published during the first half of 1919 by Mr. Theodore Shonts, president of New York City transit-corporations, and exhibited in the cars as arguments for the increase in fares, stated that the average wage paid by these corporations had risen during the war by 62 per cent. Yet in other issues of these same bulletins it was stated that the price of coal had risen during the same period by 83 per cent, and general supplies by over 100 per cent. The sympathy and confidence of the public was alienated, as always in these blundering efforts of the corporations at educating the people, by the failure to put all these cogently interesting facts side by side, in the same bulletin; to show that, as always under rising prices, *prices have risen faster than wages, so that the purchasing-power of the wage was least when the wage was highest.*

As wages have risen their purchasing-power has fallen. There can be no understanding of the problem of prices until this basic, cogent fact has been grasped. Neither the strike nor any other weapon in the hands of labor has ever yet accomplished, nor can ever hope to accomplish, any elevation of purchasing-power *relatively to average income.* The price insists upon rising faster than the rising wage.

Every strike, whether it wins or loses in the momentary sense, always loses in the end, by raising prices and depressing purchasing-power. The history of recent decades has been just this—wages higher than ever before in a century, yet labor steadily becoming more discontented. The commercialists say that this discontent is an unreasonable whim. Labor says that it is a natural and inevitable sentiment, because the wage is insufficient. The truth is that it is natural and inevitable, not because the wage is too low but because the price is too high, in all commodities, the world over.

The commercialists, while the ablest at raising prices, are not the only ones who do it. Labor helps, in so far as it is able. Every strike raises prices. If it loses, it raises prices merely by the cost of the strike. If it wins, it raises prices by the cost of the strike plus the higher wage, plus a margin charged by the employer for collecting this higher wage from other workingmen. For *all wages, whether high or low, are paid by producers in their function of Ultimate Consumers.* There is no other source for them.

The commercialists are the only ones who truly raise prices, because labor's demands for a higher wage are enforced by the rising cost of living. But the commercialists comprise the one class which does not pay either the higher price or the higher wage. It does not pay the higher wage, in effect, because its income rises faster than the wage paid. As for the price, it receives it, not pays it. *It is labor alone which pays all increase in wages, in the form of higher prices paid for everything.*

Economic Lag.—Whenever wages react upon prices, or prices react upon prices through wages, the effect is always delayed somewhat in time, and always exaggerated in amount. Both facts disguise the simple truth, into an apparently intricate obscurity which frightens many minds.

The delay in time is due to our lack of any means for adjusting wages, prices, demands, or any other economic factor, in a prompt, systematic, rational, national manner. We leave everything to haphazard bargaining between private, irresponsible individuals—and then wonder why turmoil results, or else blame somebody's else's lack of Christian character for the fruit of our own stupid laziness!

The exaggeration in amount is due to the various commercial charges attached to the collection of the larger margins from many individuals scattered throughout the land, through the employers and shop-keepers as collection-agents. We treat our collection of economic strength from the public in the same irresponsible manner as ancient nations treated their collections of governmental support, by leaving it to private, irresponsible tax-gatherers, who were rewarded with whatever margin of profit they could succeed in collecting above the demands of the government above them.

This was a method already discredited in the minds of all good men when the New Testament was written. The most scurrilous thing said about Jesus was that he consorted with publicans—the profit-paid tax-gatherers of that day. Yet we wonder why the modern construction of our entire civilization upon the principle and policy of the Judean publican results in rising prices, dropping production and increasing unrest!

The Ultimate Consumer the Sole Source of Wealth.—For both the wage-earner and the public sorely need to learn, before they can understand such simple problems as prices, strikes, etc., that the employer, even if he be a producer (which usually he is not), is not in any way a source of wealth. He is a mere agent—an agent for the finding of labor to fill the demands of the Ultimate Consumer—an agent for the distribution to labor of the wealth collected from the Ultimate Consumer. He neither makes jobs nor provides money; nor, in his function of profit-maker, even produces supplies. Even if he be a producer, he contributes to labor *not when he hires, but when, in company with the millions, he buys* FOR PERSONAL, ULTIMATE CONSUMPTION.

The employer, as such, is purely an intermediary. Not a dollar of the steady increase in wages throughout the last seventy-five years has come out of his pocket. Not a dollar of the steady rise in prices during the last twenty-five years has gone through his hands to reach productive labor, without those hands having been enriched thereby. The impressive prosperity of the employer-class, unexampled by any precedent in history (save those which have ended in revolution), stands in irrefutable support of this statement.

Technical Education and Prices.—Again, so far as improvement in either the appliances or the average intelligence of our national factory-force, through progress in science and popular technique, is concerned, it is obvious that this factor, by its improvement in our mechanical efficiency, can have the effect only of *lowering* prices. Yet it will do this without depressing wages, which will rise because the producer is producing more. It therefore must increase the purchasing-power of the wage.

But, since the last quarter-century has been unquestionably a period of progress in technology such as never before occurred in history, yet this factor of advance in intelligence must be dismissed promptly from consideration, as plainly overruled by some force far greater than itself. Indeed, our prime problem in technical science itself is to explain prices rising universally, at a rate unknown since Napoleonic times, in the face of marvelously reduced technical, factory-system costs of production.

Commercialism Indicted by Elimination of Other Factors.—Thus it becomes obvious from Table 64, by the mere process of elimination, that the retroactive effect of prices upon prices must be confined to the productive costs involved. It can have no influence over any of the commercial factors involved, because neither interest, dividends nor rent can be truly affected, in any legitimate way, by any current rise in prices of materials or labor; for interest, dividends and rent rest upon neither the consumption of materials nor the exertions of labor.[3]

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[3] It is a too familiar contention on the part of the landlords, during this winter of 1919-20, that rents must rise because prices and wages

According to Professor Fisher's law, interest, dividends and rent are the determinants of rising valuations, and not their resultants. It was stated plainly, in the chapters upon Interest, what we believed dividends and rent did depend upon. Here our duty is confined to showing that they do not depend upon prices.

Surplus, for its part, is quite aside and independent, determined by no other factors whatever than the ability of the commercialists to collect it.

As to the salaries, wages and costs involved in selling, while these must rise *per person* with rising prices, yet the relative number of persons involved in selling, and their relative caliber, is—nominally and apparently, at least—within the personal control of the commercialist. He cannot alter appreciably the output per dollar of productive wages; only the technician and the superintendent can do that. But the commercialist can, and commonly does, alter widely both the membership and the caliber of his selling-force, per unit of output. It is this which is now the chief factor in rising prices.

The commercialist may vary the personnel of his selling-force, either in numbers or caliber, in proportion to his producers. He may assume greater costs for advertising (while his competitor does the same). He may incur larger financial charges. He may insist upon a more rapid accumulation of surplus.

He may be able to expand these items so that he himself pockets the gain from the higher prices. He may be so harassed by competition that these items are expanded without enriching him. He may even become bankrupted thereby. But none of these considerations has any bearing upon the fact that it is these commercial factors alone which can elevate prices relatively to incomes; for no mere rise in wages can accomplish more than to *raise prices and incomes simultaneously,* thus leaving purchasing-powers unaltered.

Nor have any of these doubts as to the prosperity of the commercialist any bearing upon the hardship of the Ultimate Consumer. The Ultimate Consumer, when oppressed by high prices *has no alternative than to pay them;* whereas the commercialist,

are rising. So far as the landlord pays costs of depreciation and wages to labor, this is true. *But true rent begins only after these things have been disposed of.* We continue to be duped by the landlords only because we are content to remain muddled as to elementary definitions in political economy.

at any time that he may find his function a hardship, *may always leave it and return to the productive ranks.*

Above all debate stands the fact that, for seven or eight decades past, there has been a relentless migration in the opposite direction—out of production and into commercialism—*because the latter pays better.* Deeds talk louder than words.

Automatic Involuntariness Again.—As was said above, it is apparently a matter of free choice with each seller whether he shall expand his selling-efforts or not. Such is the common belief. Actually, however, the seller is rigorously coerced in all these matters, by such factors as population, transportative and communicative facilities, etc., which are constantly expanding, and which lie wholly outside his control. The whole energy of modern inventive progress is now engaged in forcing him into a continual expansion of his non-productive, combative disbursement of wages, as well as of his financial costs and his personal profits.

Prices fixed by Commercial, not by Productive, Factors.—But the point of interest to us at present is not whether these are matters of free will or not, but whether prices are fixed by commercial rather than productive costs, or not. Our important task is to make it clear that, however this retroactive effect of prices upon prices might be argued as including some of the commercial factors, it cannot, even then, explain continually rising (or falling) prices. Such an argument is like a man's effort at lifting himself by pulling on his own boot-straps.

Any price-increment once embodied in "PRICES," at the foot of Table 64, must transfer itself, following the arrows, once around the circle; but no more. If it receives no increment between top and bottom of the table, from a shift of personnel from one subclass to another, then it must come out as it went in.

The Secret of Rising Prices.—The complete explanation of modern rising prices is that such a shift has been occurring upon a gigantic scale. As shown by our tables analyzing the census-reports, there has been a continual, irresistible tide of migration from the productive subclass to the commercial ones.

We need no explanation so foolish as any boot-strap-lifting reaction of prices upon prices. It is only factors 3 to 6, in Table 64, which are capable of raising prices faster than wages, if at all, and thus decreasing the people's purchasing-power and increasing their discontent. Every source of information upon which we have tried to draw has shown that these factors have been increasing steadily, rapidly and acceleratingly throughout the last seventy-five years. During the last two decades this acceleration has been marked.

The Effect of Gold-Supply upon Prices.—We have thus seen that high prices, in themselves, constitute no public hardship; nor do low wages. If there be no dissipation of economic strength due to subclasses 3 to 6, high prices or low wages would be just as conductive to general content as their opposite, because incomes would be high or low with prices.

Nevertheless, it is of secondary interest to inquire as to some of the factors which determine general levels of prices and incomes, even if they have no bearing upon popular contentedness. Indeed, that is why it is important to debate them accurately here; for the public is now wasting invaluable time and effort, while Rome burns, in discussion of many factors which are quite incompetent and irrelevant to the question of social contentedness and stability.

Thus, when we consider all the possible, if secondary, factors which may affect prices, one must admit the increasing ease of gold-production as one deserving attention. Yet in the majority of minds the significance of this factor is grossly exaggerated into a complete sovereignty. Care must therefore be taken to give it its proper weight and place.

In the first place, there is no general connection, as is so commonly believed between the aggregate *quantity* of gold on hand and the price of other commodities. Even the price of gold itself does not depend upon its quantity in accumulation, because there is no current consumption of gold. The quantity of gold affects merely the *stability of paper or other token-money based thereon.* That fact was made clear in Chapter V, upon Credit.

The price of gold depends solely upon the labor and other cost involved in its production. A surplus or deficit in the world's accumulation of gold determines, not its price, but merely the amount of labor which must temporarily be diverted away from other occupations into gold-production, to make good this deficit, or the reverse. Momentarily this has a slight effect in fluctuating prices, but this is only to the degree that the gold-deficit bears to the *aggregate of all production*—always an insignificant, inappreciable ratio.

Permanently, the quantity of gold has no influence upon prices. Too little gold on hand means not a high price for gold, but instability of circulating-medium. It is *ease in production of gold,* and not quantity on hand, which tends to cause high prices.

It is a parallel statement to say that no hoarding of gold by the "money-barons," nor their "monopoly of the gold-market," has any untoward influence upon prices. These people do harm enough economically in other ways, as detailed in this book, it is true; but their control of our stock of gold is a benefit, not a harm. It stabilizes the circulating medium.

The money-people want that because without it they cannot do business and make profits. The people want it because they too want business done, even if at their cost. Until we get a better, non-commercial, profitless system it is far better for the people to have business done, even at their exploitation, than it is to have "hard times" and not even a half-loaf of bread.

To those who feel that economic ills are due to the private ownership of our stores of gold it will be acceded promptly that this is true—in proper proportion. That is to say, gold or any other standard having once been agreed upon, it thereby becomes an essential to the life of the community. The private ownership of it then works harm, just as the private ownership of any other essential to community-life, whether in the form of tangible appliances or intangible opportunities, works harm.

But the truth goes no farther than this. That is to say, it is the institution of ownership-in-industry, we shall see, which works the harm, with no perceptible difference whether that ownership concerns gold, or steel, or a factory-site, or a mailing-list, or a drug-store.

Theory of the Relation between Prices and Gold Supply.—Thus, for a brief statement of the gold-theory, let us imagine that overnight some discovery of new mines, or some improvement in the process of extraction, had made it possible to produce two ounces of gold with the same labor and cost previously required for one. The first result of this would be to upset all previous conditions. Many people would rush into the production of gold.

But an early result of their attempts to spend this easily acquired supply of gold would be to double all prices—ostensibly and temporarily because of a greater demand for commodities, but really because the cost of gold had been halved. For the gold-diggers would soon learn that their labor was enriching them no faster than it had done at bench or plow, and would return to the previous vocations. This has been instanced repeatedly in the history of gold-crazes.

But this doubling of prices should cause no hardship to anyone, except temporarily, for all prices would be affected equally. Those who sold commodities would have their incomes doubled automatically, to meet doubled expenses. Labor would suffer temporarily, it is true; but only until wages had been forced up to double, partly by the departure of laborers for the gold-mines, and afterwards, after they had come back, by strikes. But, as employers would then be able to pay double wages, after the innovation, equally with their ability to pay single wages before, there would be little trouble in reaching this adjustment.

In short, any facilitation whatever in the supply of gold, providing it occurred gradually, could have no effect upon basic economic conditions, except to increase equally all scales of prices. Hence it could have no bearing upon public content or discontent.

Price-Variation during Past Centuries.—This, apparently, is what has been occurring over several centuries of European history. Table 65 presents some data as to this (reduced to the same terms as Table 63) which are of more than passing interest. They were collected by Sir George Evelyn in 1798, as to prices dating as far back as the year 1050, and are quoted here from Professor Laughlin's "The Principles of Money." Table 65 shows how even has been the rate of advance in prices over all these centuries, provided no units of time smaller than a half-century be considered. During the seven centuries from 1050 to 1750 the rate of growth has varied from an average of 65 per cent per century only through a range from 56 to 74 per cent.

During the period from 1750 to 1810, however, this rate of growth was accelerated to 186 per cent per century, while from 1810 to 1895 the growth was reversed into a shrinkage at the rate of 73 per cent per century. About 1895 this shrinkage was again reversed into a growth, averaging to 1915 the rate of 178 per cent per century. Apparently our economic troubles due to instability of prices are comparatively modern.

During these centuries there occurred all manner of fluctuations in public content, due to political oppression, unjust taxation, local famine, etc., etc., which were too temporary to appear in our blanket-data for these times. But they were not, so far as we know, caused by this increasing ease in gold-supply.

TABLE 65

VARIATION IN ENGLISH PRICES, 1050 TO 1800 (1900 = 100)

Year	Index Number	Rate of Growth: Per Cent per Century
1050	9	...
1550	35	58
1600	48	74
1650	65	71
1700	83	56
1750	111	68
1800	200	160

The production of gold is a technical task, whereas the principal commodities of those centuries depended only upon agriculture, breeding, grazing, etc., or upon the standard crafts—all vocations essentially simple, which underwent little change during this long period. But gold-production is also facilitated by expansion of geographical knowledge, and this sort of progress, while prevailing throughout all of these seven centuries, was particularly characteristic of the first one and the last three.

Therefore gold fell continually in value relatively to grain, meat and clothing. In 1050 a gold-piece which would now be worth ten dollars would then have been worth about $111, in terms of relative labor, and in purchasing-power the discrepancy would be far greater.

Many of the incidents of medieval history or tradition involving gold-pieces, which sound melodramatic to modern ears, become reasonable in the light of this fact. In those days a king or nobleman seemed to be able to command almost any sort of service merely by passing out a gold-piece. And he always had it with him. Now we know why.

Then, when there were no safe systems of exchange, a man must carry his investment in business, or his pecuniary power as a nobleman, about with him in gold coin. Then he was able to do so.

To-day even a sturdy soldier is expected to carry a maximum weight which, if in gold coin, would be valued at less than seventeen thousand dollars. Indeed, the ordinary man of to-day would not care to carry in a belt more than five thousand dollars in gold, if that much—and we know from the suits of armor that the average man of to-day is sturdier than the average knight of old. But in the year 1050 these weights in gold would have been worth $185,000 and $55,000 respectively, in labor, and more than that in purchasing-power—sums commanding respect for the bearer, and well worthy of a highwayman's risk of the gallows.

In this, as in many other things, it appears that our readiness to ascribe the prevalence of gibbets, jails and racks in earlier days solely to deficiencies in the moral standards of those times is not founded upon fact. These early judicial crudities are largely merely the outward expression of corresponding and causative economic crudities, reacting upon a human nature quite like our own.

For a man to be broken upon the wheel for mere counterfeiting sounds terribly savage. But when one remembers that there were then no banks, in the modern sense, no bank-checks, no systems of exchange, no clearing-houses, no paper securities, no bills, etc., *coin being the sole circulating medium, upon which all industry and commerce must depend,* the fact takes on a different aspect. Counterfeiting was then a blow at the heart of society.

Even to-day, in half-wild grazing-countries, where not only a man's whole livelihood, but even his safety from death by starvation or thirst, depends upon the constant companionship of a horse, horse-stealing becomes most naturally a capital crime. In remote coastal communities, where the same is true of boats and gear, such property left unguarded upon the beach is held equally sacred by public opinion.

Without attempting to argue that penal codes were no more cruel during the medieval centuries than now, it is still true that the apparent contrast between then and now needs to be toned down by several shades, when the economic facts come to be considered. As for modern progress, to-day we have done away with breaking upon the wheel, it is true; but debasement of the currency (in purchasing-power) is going on now faster than in the days of Edward I. Indeed, not until the story is told in future decades, can we be sure that the ultimate retribution therefor may not be even more cruel than breaking upon the wheel.

The prime fact is that it was not until about 1750 that there appeared the first departure from this apparently gradual, general rise in prices, such as requires the hypothesis of some compelling force other than the gradual increase in ease of gold-production. It is these modern fluctuations in prices which concern the analysis of economic causes in hand. For while the steady rise from 1050 to 1750, at least in its broad aspect, may be swept out of the way by explanation in terms of the price of gold, yet this will not do for what has happened during the last century.

For all during this century the ease of gold-production has been upon the increase; yet the price-level does not follow as it should. While the temporary rise of prices between 1850 and 1870 may easily be attributed, in part, to the discovery of gold in California in 1849, the rest of the century demands more careful study of other causes.

Professional Economists and the Gold Theory of Prices.— In order to present first the case of the protagonists of the gold-explanation, reference may be made to two full-page publications of the New York *Times,* on Jan. 2, 1910, and Sept. 17, 1911, respectively, giving a symposium of the views on this question from representative authorities upon economic matters. This source of information is also selected because the *Times* is one of the ablest and most active journals in the cultivation of public opinion in favor of commercialistic philosophies.

In these two publications appear parallel diagrams of gold-accumulation and of prices, with arguments from several authorities. Those appearing in favor of the gold-theory are Professors Taussig, of Harvard; Fisher, of Yale; Seligman, of Columbia, and Dewey, of the Massachusetts Institute of Technology. Those actively opposing it are Professors Laughlin, of the University of Chicago, and Patten, of the University of Pennsylvania. Professors Goodnow and Clarke, of Columbia, and Kennedy, of the University of Illinois, ascribe rising prices to the exhaustion of natural resources by increase in population.

But, as to the gold-hypothesis, the very diagrams published in these articles in the *Times* defeat that hypothesis, so far as relevancy to modern fluctuations in prices is concerned. The ease in gold-production has progressed fairly steadily, excepting for two temporary accelerations—one in 1849, due to the discovery of gold in California, and the other about 1888, due to the Klondike and Cape Nome discoveries, and to improvements in quartz-mills and general facilities for transportation. It is true that each of these years approximately inaugurated a rise in prices, and gold is doubtless a factor therein; but the gold-theory offers no solution for the following phenomena:

1. The greatest rise of prices in modern history, that between 1750 and 1810;
2. The two great drops in prices occupying the bulk of the nineteenth century, throughout which period the ease in gold-production was always increasing;
3. The drop in prices between 1888 and 1895 or 1898, when gold had begun to cheapen in a marked manner, yet prices continued to fall;
4. The marked rise in prices since 1898, during which period there has been no appreciable change in the ease of production of gold, except perhaps in the direction which would drop prices.

Very plainly, while variations in the ease of production of gold must always exert its effect upon prices, yet there are other and more powerful factors than gold at work in the control of prices. What are they?

The Tariff and Prices.—In this same *Times* articles Mr. J. J. Rooney is quoted at length in support of the theory that the high cost of living is due to the tariff. Without denying that the effect of the tariff is to increase prices—which has always been the prime reason, indeed, for advocating it—and without digressing to enter that unlimited topic, the tariff itself—yet it is to be pointed out that *it was during the period when the tariff was being raised at its each modification—from 1875 to 1895, say—that prices were falling; and that it is since the first real modification of the tariff downwardly, a few years ago, that prices have risen most rapidly.*

Plainly, since we admit that the tariff raises prices, the forces which exert dominant control over prices must be of an order of magnitude altogether larger than the tariff; for they completely overwhelm, to the point of invisibility, this natural tendency of tariff-changes, up or down, to cause prices to follow.

Density of Population and Prices.—Consider next the doctrine which ascribes high prices to a reduction in the opportunity for production, due to increasing population. This is such a favorite explanation of all manner of undesirable social phenomena that it is necessary to answer it in equally sweeping fashion.

If increase in population had actually increased the difficulty of extraction of life-support from the earth—with Malthus' short-sighted old "law of decreasing returns" as the sole function at work—*then life must have been easiest on this continent when its population was least, early in the seventeenth century, becoming steadily harder with the never varying increase in population, down to the twentieth century!*

But obviously the facts have been the exact opposite of this. Every man in the street knows that life here in the seventeenth and eighteenth centuries was toilsome in the extreme, with famine often abroad in spite of the toil, the surplus land and the plenteous game; and that, speaking generally, life has become easier ever since, almost as steadily as the population has increased. There is not the slightest room for doubt that the ease and comfort of life increase in some direct relation with, and easily as some higher power of, the density of population.

In normal life men help, not hinder, each other. The duty of the professional economist is to accept this obvious, common-sense fact, and to ascertain with mathematical accuracy the exact formula which connects the increase of life-support with the increase in population, rather than to confuse understanding and delay progress by mythical assumptions for which there is no foundation in fact.

The Slums and Prices.—In only one local, temporary and abnormal instance may it be argued that sheer congestion of population (in a sense contrasted with a normal growth in density) begets difficulty in living. This is the city-slum.

In so far as the institution of commercialism concentrates people artificially in cities, by denying to farming its natural pecuniary reward, this forced and unwholesome distortion of the natural distribution of life between city and country does interfere, temporarily and partially, with the natural tendency of productivity per individual to increase with population. Yet even here, it must be noted, population flocks from the farms to the slums, as we have seen, primarily *because it is easier to make a living in the slums than on the farms.*

But, in America at least, even this detrimental phenomenon of the slums has been restricted to a minor function in the control of national productivity. It has not been competent to annul the natural tendency of individual productivity, and hence ease of living, to increase with population. This is proven by Tables 14 to 18, showing that *the supply of all staple commodities* PER CAPITA *has actually increased steadily with the population.* In the later decades, indeed, it has increased very rapidly therewith.

Our social discontent does not arise from insufficiency of production (although that, viewed relatively to our latent possibilities, is a factor) but to *disparity and uncertainty of income.* For that is increasing with the population, while aggregate and per-capita supplies are increasing.

Supply and Demand as Determinants of Price.—In the face of these simple statistics every suggestion that high prices are due to density of population, *or even that there is any direct connection whatever between supply and prices, in the national sense,* becomes absurd. If there were any such a connection then either these tables must show the supplies per capita as irregularly decreasing, in order to explain the rising prices; or else they must show the prices as steadily decreasing, in order to reveal the increasing supplies as working their normal result. But neither of these things appears in the statistics.

A single possible exception to these statements as to the increasing supply is to be found in the case of meat. Meat is a commodity producible only by a relatively wasteful use of land, and for that reason it probably must be dropped gradually from our diet as the density of population increases. But what is said elsewhere as to prices in general applies also to the price of meat, in that the latter is now determined more by commercial than by natural causes.

The man-in-the-street feels that he knows that prices are the result of a balance struck between supply and demand. Yet the facts so far adduced negative this idea broadly. Speaking generally, the careful economist can find almost no connection between supply or demand, on the one hand, and prices on the other, except in a local, temporary and secondary sense.

Vacant-lot Gardening.—Take for example the recent nation-wide drive to increase our food-supply by vacant-lot gardening, and so to reduce the price. What is the result? A certain quantity of vegetables has been produced. Therefore just that much less truck has been bought from the professional gardener. *Therefore just that much less of his stuff has been sold, the* *surplus rots on the ground, and so next year he plants just that much less.*

The amount of anything which can be produced is only the amount which can be sold. The vacant-lot gardens had no slightest effect upon the amount which could be sold, except to decrease it. They added not one penny to the purchasing-power of the nation for vegetables. Hence they left the total amount of garden-truck unaffected, merely transferring a part of it from the farm to the vacant lot.

It is true that the purchasing-power of the government was markedly increased, at just about this time, by the issue of enormous volumes of war-credits, and these credits purchased enormous quantities of food-stuffs and so stimulated production—a process to which we shall give full attention further on. But, in the first place, the vacant-lot gardens had nothing to do with the appearance of these war-credits. In the second place, *this method of stimulating production, far from reducing prices, sent them soaring!*

Under peace-conditions, with an unvarying or slowly varying volume of governmental credit extant, the result of amateur gardening, or any other artificially stimulated production, cannot be, in the long run, to release a single additional pound of food for consumption. The amount of food remains substantially constant, except as the purchasing-power of the people is slowly reduced by the growth of commercialism, and as the productive capacity of the farmer is slowly increased by progress in scientific agriculture. At the same time, the allurements of commercial incomes are steadily reducing the agricultural population, by migration to the cities.

The combined result of these three slowly changing factors, when viewed over several decades, has been a slowly increasing production of food per capita, and a slowly decreasing production relatively to our rising latent (but not evolved) productivity, or theoretic ability to produce. *But a simultaneous result of these same three processes, in combination, has been a steady, rapid and accelerating rise in its price.*

The farmers are always raising more than they can sell profitably. Since their land is capable always of doing far more than this, it were folly to do less. As in every other walk of economic life, the supply is always greater than the people's purchasing-power. The amount which our farmers can raise is determined neither by territorial limitations, nor by the amount of land improved (which is itself determined by the produce which can be sold when raised), nor by technical aids to agriculture, nor by the amount of labor available in the country as a whole. *It is determined solely by the purchasing-power of the cities.*

The amount raised to-day is certainly not one-half, and easily not one-tenth, of that made possible by modern technology on the acreage already improved, with the labor already available, *were only the economic bars to selling it once removed.* Further, if it were not for these same artificial economic bars to interchange, and hence production, a vast acreage now lying idle and unimproved near our large cities would immediately be put to use.

It is for all these reasons that there is no visible connection between "bumper crops" and popular prosperity or contentedness. Hard times in the cities may reduce the acreage planted in the country, for it is in the city that is determined what shall happen in the country; but botanical exuberance in the country finds no necessary reflection in prosperity in town. Cause and effect act here in the opposite direction. Indeed, the prime economic result of bumper crops is often to make the farmer poor, by dropping prices for farm-produce.

The farmer, in his poor, weak way, knows the importance of "charging all the traffic will bear," by restricting production far below normal in order that pecuniary gains may be a maximum, only less clearly than does the businessman. While it may not be a conscious and dominant policy with him, as it is with the city-businessman, yet he is forced into it no less inexorably—by the increasing starvation of those who insist upon remaining upon the farm, to raise surplus produce which must rot on the ground.

Commercial Distortion of Natural Supply and Demand.—The explanation of all this lies in the artificial distortion which is given to both supply and demand by commercialism. In the commercial world it is never the supply of the real producer which is balanced against the Consumer's demand; it is that of the retail commercialist instead. In no case is the demand which reaches the producer that put forth by the Ultimate Consumer; it is that of the commercialist-employer, instead; and he passes on to the producer a mere fraction of the price paid by the Consumer.

Thus there may be no demand whatever in the commercial world for chilled car-wheels at a time when millions of congested city-people are suffering tragically for more cars, and would gladly pay for them—if only their money could be gotten through to those who make cars. Or there may be in commercialdom a most active demand for drummers for inciting trade, say, when no Consumer in the land expresses the slightest need for a drummer, to incite him to spend all he can afford to spend.

Then the purchasing-power of the commercial world experiences violent, unnatural fluctuations through the sudden release of demand through an expansion in the valuation of securities; or a retraction of demand through a temporary collapse in the stock-market. This is a fluctuation in commercial demand, with its effect upon prices, due to fluctuations in the current volume of commercial *credit*—a most important factor in prices to which the discussion will recur later.

But all of these artificial phenomena are in direct contrast with the natural state of affairs. *For both supply and demand, in their true human sense, are quite steady.* They vary only with the gradual drift of population in many lands together, or with the slow education of myriads of people. It is impossible to-day to convey to the mind, so long have we steeped in the tradition of spasmodic and violent fluctuations of both supply and demand as being natural and inevitable, any adequate conception of how massively slow and steady they both are in their natural movements. It is only the toxic influence of commercialism which makes them stagger, leap, shout, sing—and occasionally commit murder.

Fashion, now and then, may flit capriciously from commodity to commodity, it is true; but this can have no influence over the general level of prices. All it can do is to raise one price as it drops another. Neither the natural specific productivity nor the natural rate of consumption, in aggregate for any community, varies with fashion or whim. Hence personal exhortation to control them by direct effort is silly.

All our alternating periods of hard times and prosperity, of low or high prices, of active or dull trade, are the result of purely artificial and commercial, and not at all of natural or human factors—of reaction of invention upon invention, and not of anything psychic. It is the instability of our economic structure, due to our lack of organizational underpinning for our economic effort, and not the flippant nature of the human individual, which forces prices and volumes of trade and employment to wabble and flop back and forth convulsively.

The Function of Psychic Forces.—When one turns from the physical or organizational to the psychological aspect of the problem of prices one discovers a partial, secondary effectiveness in one of the causes adduced by the professors quoted, namely, *disparity of wealth.* Professor Taussig follows the late James J. Hill in laying stress upon the "cost of high living" as an explanation of the high cost of low living, although he also leans heavily upon the gold-theory.

It is unquestionable that discontent depends far more upon relative than upon absolute want. It is the growing disparity of wealth, rather than real poverty, which explains the turbulence amongst the wage-earners. If the poorer classes observe wanton display upon the part of the rich they are the last to be blamed if they make every effort to copy, or if they become bitter when they fail. It is the tempter who sins, rather than the tempted.

Psychic Forces are not Causative, but Secondary.—But these conditions are psychological, not physical nor economic. They may explain standards of desire, but they have no bearing upon purchasing-power or prices. No person can bring hardship upon himself by buying so much as to send prices up cruelly—so that his voluntary reversal of this policy, under the kindly guidance of the Taussig-Hill school, might ease matters for him. The poor suffer hardship from high prices, but those prices are not high because of the lavish quantities which the poor buy.

The rich, on the other hand, might easily be suspected of buying so much as to send prices up, but never to the extent of personal hardship to the buyer. Therefore Professor Taussig must appeal to the rich to abstain in the interests of the poor —a line of attack which has not hitherto brought results which might be called encouraging.

But even if the rich should respond, and should abstain, what good would it do? Their refusal to spend their money would in no wise relieve the poor. Any reduction in the purchases by the rich would certainly reduce the volume of goods made, and hence the *employment* for the poor, but it would have no slightest tendency to drop *prices.* We have seen that there is no visible connection between supply or demand and price.

While these childish appeals to the superficial impulses of the ignorant, to make direct attack upon the economic problem in one futile way or another, may be excusable in an ignorant labor-leader, it does seem as if the dignity of the professional sociologist, if not his intelligence, should protect us from puerilities of this sort.

Summary of General Factors in Price-Determination.—To summarize, prices are the result of a reaction between natural physical and artificial commercial forces through the medium of at least four determining factors, namely, (1) *The productive capacity of the population, or supply.* This, properly speaking, should be, when balanced against demand, the only factor determining price. Normally and naturally it is all but constant, growing only very slowly and steadily. It is naturally dependent only upon the territorial and technical advantages enjoyed by a nation, both of which alter only slowly and steadily.

Yet at present this purely physical and only natural aspect of supply is an indiscernible factor in prices. The only way in which it enters at all, indeed, is through the medium of the question of the number of people which commercialism permits to remain active in production, as contrasted with those enticed away by the more lucrative occupations of commercial militarism—or compelled to remain idle, as debated in the later chapter upon Unemployment. But this latter is an artificial factor.

(2) *The ease of production of gold.* This factor amounts merely to a measuring-unit, or scale. It affects all prices alike, whether those of commodities or the wages of labor, although not with equal promptness. It is a variant function only in terms of time, and not of one commodity against another.

This factor also alters fairly steadily, except for such infrequent discoveries of gold as that of California in 1849, or that of Alaska some forty years later—occurrences which are not likely to repeat themselves in the future.

(3) *The intensity of active commercialism current in proportion to production, and also the current burden of interest-payments.* These add to the natural cost of every commodity (as measured in gold) the cost of commercial combat, to determine the final valuation of the commodity to be collected from the Ultimate Consumer. Commercialism acts in this way in

addition to its function in limiting the personnel of production. This factor is also capable of alteration only slowly, in comparison with the next factor—credit—although rapidly in comparison with the first and second factors.

(4) *The momentary volume of credit available for sustaining purchases.* While this, in part, is an intangible, psychological affair, and therefore subject to frequent and irresponsible fluctuation, yet more than that, it is a tangible, deliberately organized, economic institution. In this latter aspect it depends upon the ebb and flow of valuations in Wall street—itself not altogether a planless phenomenon. This momentary aggregate volume of security-valuations determines monetary, commercial *demand*—as contrasted with human need.

For this last factor in prices is not merely subject to fluctuation through the deliberate efforts of manipulators to vary it, but also through its own inherent super-sensitiveness and instability. These features are so extreme, indeed, that no degree of effort upon the part of the financial people—even if we could imagine them as exerting it—could keep valuations quiet. In reality, the vagaries of this oversensitive medium, upon which we have chosen to build our economic shelters, become, under the deliberate teasing of professional manipulators, such as all but defy record. Not even the tickers can keep track of it.

Times of extensive credit are periods of active buying and elevation of prices. The public then can buy that for which it can pay out of current earnings, plus that paid for in credit; and it has been seen how, in times of commercial expansion, the largest industrial enterprises purchase by the latter means upon an enormous scale. Indeed, according to the public testimony of the most prominent railway and bank officials, commercialism has brought these enterprises to rely upon this function for their very life-support.

This, indeed, is the peril which we are building for ourselves. A sudden collapse of commercial credit, at a critical period of economic tension, will plunge every factory and railroad in the land into a stroke of apoplexy. The unemployed will pour upon the streets by the million, and revolution will be instantly irrevocable.

Statistical Corroboration.—Statistics should reveal this relation between volume of credit-instruments, on the one hand, and the rise of prices, as a result of exaggerated demand, on the other. The lower lines of Table 11, Chapter V, should show a parallel variation between credit and price indexes.

Roughly, they do so, in that both are highest in the earlier and the later decades, while sagging in the middle. But the parallelism is too approximate for complete satisfaction. Thus, the credit-figure reaches its minimum in 1875, and is then only slightly below that of 1865, whereas the price-figure does not reach its minimum until 1895 and is then nearly 40 per cent below that for 1865. The credit-figure for 1915 is over twice that for 1865, whereas the price-figure for 1915 is 14 per cent less than that for 1865.

The explanation of these apparent discrepancies lies in the fact that commercial credit is not the only controller of prices, nor is our own land an isolated economic field. Prices in America and Europe vary fairly closely together, as the result of forces arising in both continents, however those in America may be uniformly higher than in Europe. At this juncture, therefore, economic influences must be traced briefly across the Atlantic.

Of the four factors listed above, the first three have already been sufficiently debated. The natural influence of productivity upon prices has been found to be overruled into impotence, and lost to sight. That of the increasing ease of gold-supply equalizes itself, given a little time, upon all sides of the situation. That of commercialism is huge and dominating, but it has already been explored in its structural detail. That of credit alone, as one feature of commercialism the workings of which have not yet been fully explained, remains to be considered.

But the disturbing effect of fluctuations in commercial credit upon prices cannot be debated properly without a careful discussion, first, of the function of war in fluctuating credits. Indeed, the natural intimacy existing between war and commercialism is one of our most important secondary topics.

The Influence of War upon Prices.—Doubtless one of the prime factors in the elevation of prices is war. This is obvious to the most cursory student of history. As Mulhall states it in his "History of Prices":

> "The wars of Bonaparte drove up prices of agricultural products 72 per cent, and those of manufactured goods 38 per cent. . . . Again, there was a rise consequent upon the wars of 1851-60 (namely, the Crimean and Solferino campaigns,

> and the Indian mutiny) when agricultural prices rose 16 per cent and the general price-level of the world showed an advance of 5 per cent. In the third place, the American war of 1861-65 had such an effect that prices rose 78 per cent in the United States and 52 per cent in Great Britain, over the level of 1841-50; and taking the whole decade of 1861-70 we find that its level for the whole world was 21 per cent higher in agricultural products, and 11 per cent higher for the general level of all merchandise, than the decade ending in 1850. It is impossible, therefore, to doubt Tooke's theory that 'war has a tendency to raise prices, by obstructing or diminishing the supply of commodities.'
>
> "The peace that succeeded Waterloo saw prices fall nearly 50 per cent, the world's level for the decade ending 1830 being 33 per cent less than the average for 1811-20. In like manner there was a steady decline after the war in the United States, the decade of 1871-80 for the world being 5 per cent under the preceding, and we have had a continuous fall of prices since the Franco-German war. In a word, peace restores the level of the natural tendency of prices that was disturbed by war."

But, while admitting the causative effect of war upon prices, we do deny here Tooke's theory that it is chiefly by "obstructing or diminishing the supply of commodities" that war accomplishes it. While this process is contributory, it proves to be quite secondary. There is another, larger force at work in the elevation of prices by war.

For the data appearing in Table 62 do not all agree with Mulhall's figures. According to Jevons and Sauerbeck the American Civil War, to which Mulhall ascribes such violent disturbance, caused scarcely a ripple in the current price-level. Again, the period from 1900 to 1914, which has been one of unbroken peace in the United States, *has witnessed the most rapid rise in prices ever recorded*—distinctly higher than during the prolonged Napoleonic wars, involving virtually the entire continent of Europe. Plainly the war-explanation, while partly correct, is not complete in itself.

Moreover, in Napoleonic days Europe was virtually the entire economic world. While it is true that America and the East Indies were exporting to Europe what commodities might be carried in a few hundred vessels, few of which exceeded five hundred tons burden and all of which consumed months in a voyage, from the rest of the world Europe drew almost nothing of staple importance. Therefore in Napoleon's day it was the entire economic world which was at war.

But since 1895, although there has always been war somewhere on the earth's surface, yet it has never involved more than a fraction—and, except for the war of 1914, a very small fraction—of the commercially unified world, at any one time. Yet prices have risen since 1895 as never before, either during the stormy average of the Victorian era or during the tornadic violence of the Napoleonic period. We must look further than war for a full explanation of the rise of prices.

It is undoubtedly true that war shuts off some of the sources of supply normal to peace, which is Mulhall's explanation of the situation. But prices do not depend upon supply.

It is undoubtedly true, also, that war accentuates the destructive consumption of commodities. But a brief study of the problem shows that this is not sufficient to account for the *degree* of accentuation of prices in wartime. There is another and a larger force at work, for the time.

War not only throttles supply and exaggerates consumption. *It releases temporarily an enormous potential fund of purchasing-power.* War always expands credits marvelously.

It is not merely that war accentuates demand in the physical sense. It is that *it expands the ability of the people to give economic expression to that demand,* in the form of suddenly inflated purchasing-power. This is due to a forced expansion of public credit, which appears in the market as so much money; and this credit rests upon the outburst of patriotism which is natural at such a time, but which cannot be had in times of peace.[4]

The Identity of War and Commercialism.—So much is fairly obvious. But what is not obvious is that *it is this same sort of economic reaction, this same sudden and arbitrary expansion (or collapse) of credit, which explains these convulsive variations in prices and purchasing-power in the commercial world, in time of peace, which are so at variance with the slow,*

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[4] The amount of such sudden expansion of purchasing-power due to patriotism, in the case of the Great War, is approximately two hundred billions of dollars, for the four Allies; but most of this was expended in America.

steady and all but imperceptible movements naturally to be expected then.

There has been repeated occasion in these pages to refer to commercialism as merely one species of militarism. The identity of the two rests primarily upon the combative nature of commercialism. But a further link of identity is now revealed in this matter of credit. The history of neither militarism nor commercialism can be written without a study of the history of credit. The evolution of credit cannot be understood without that of both militarism and commercialism.

Martial and commercial credits are alike in their despotic sway over the stable and wholesome biological tendencies of life. In order to conduct war, whether martial or commercial, both men and credit are required. From the earliest periods of history the troubles of kings in procuring the credit with which to prosecute their wars has been a familiar incident. Frequently it has controlled the destinies of nations. To-day it is the commercialists and their credits which dominate the world-stage.

With the progress of the arts through the centuries this feature of warfare has increasingly become the central issue. Modern wars are won or lost more in the field of finance than in that of battle. It is the size of the loans floated successfully during the war, and the degree of faith in them latent within the mass of the people, which determines victory or defeat.

It is this also, in both martial and commercial warfare, which determines the elevation of prices. In each case it is both the withdrawal of men from production and the unusual release of purchasing-power, through expanded credit, which elevate prices. In each case it is partisan faith in the ability of some given fighting-unit which supplies the psychological element in the credit. In each case it is upon this faith, as a foundation, that the tangible instruments of credit are built, expanded and "floated."

In the first case this basic sentiment is called patriotism. In the second it is called commercial confidence.

The Source of Credit-Expansion.—When a people thus mobilizes its latent faith in itself, by the issue of credits for the purchase of supplies to be consumed in war, it is releasing suddenly and explosively an accumulation of economic energy which is quite in parallel with the release of physical energy in the explosion of gunpowder. There is, however, an apparent contrast between the two in the fact that, in the case of the gunpowder, the energy to be released must be accumulated beforehand, whereas that released in the form of credit is commonly supposed to be made good, in physical equivalent, at some later time.

Yet in this respect the popular conception of credit, as an advance-draft upon the community's future productive power, is wholly wrong. Nature no more consents to be man's creditor in economic energetics than in physical or chemical. In any phenomenon whatever, *only that energy can be released which is already on hand.*

Thus the economic energy which is always released suddenly, and to an astounding degree, upon each declaration of war, is merely that which has been currently accumulated, but pent up by social timidity or selfishness, during the preceding period of peace. *This energy might have been available for community-welfare at any time, had only a suitable social state of mind been present to release it.*

And, it may be noted in passing, it is social states of mind in time of peace, and the forefending of war by reason—and not the waging of war by force—which is the official business of the universities.

When war is declared this pent-up energy is released by a common agreement in state of mind such as unfortunately cannot be—or has not been—attained, it seems, in time of and for the aims of peace. It is released by a simultaneous, all but universal abandonment of those selfish aims which peculiarly characterize times of peace, and a devotion to the common good for the preservation of the state. But such a sentiment is just as important for the welfare and self-respect of the state in time of peace as in time of war—a sentiment, indeed, which, if only manifested in time of peace, would forfend war.

At present the primary factor of restraint which pens up all this valuable latent social energy is the paralyzing national belief, embodied in all the laws, organizations and traditions of commercialism, that mankind will react productively only to the selfish inducements of pecuniary gain in its most shortsighted sense. Therefore this belief should be fought by every patriotic person just as religiously as one now fights German intrigue.

For it is this belief which now enforces upon us the universal commercial policy of "charging all the traffic will bear"; and this is a process which, whatever may be the motives behind it, inevitably restricts our currently available volume of credit and purchasing-power, at every point of transfer in the economic structure, to some 70 or 80 per cent below the biological normal.

The phenomenal outburst of energy which characterizes every declaration of war is no loan nor draft upon the future. *It is merely a portion of this 70 or 80 per cent of the naturally available energy which commercialism denies to us in time of peace, through our refusal to believe in our fellow-workers as we do in our fellow-fighters, and which becomes available just as soon as we adopt that faith.*

In spite of the physical destructiveness of war, just see what that faith accomplishes! War releases such a tremendous fund of pent-up faith-credit, and with it mobilizes such a tremendous outburst of social energy, that the physical destructiveness of every war, however huge absolutely, is relatively submerged and soon lost to sight in a flood of reconstructive vigor.

The Ebb and Flow of War.—If one glances at the various martial outbursts of the last sixty-five years, on the part of those nations which together constitute that commercially unified, if politically divided, world-community which spreads across North America, Europe and portions of the other continents, they will appear as listed in Table 66. As revealed by this table, the year 1850, whence most of our statistical data take their origin, was the beginning of a martially stormy period covering two decades.

From the fall of Napoleon, in 1815, until 1848, the peace of Europe had been broken only by minor, local, internal revolutions, none of which had any lasting effect. Metternich's policy of stern repression had worked excellently, as all absolutism does, so long as it worked at all.

But in 1848 broke forth that general revolution which spread finally all over western Europe. It lasted only a year or two, it is true, and was finally put down by purely repressive measures which left all the sources of discontent in full action—held down merely by a heavier weight of militarism upon the political safety-valve than ever before. The military budget of almost every country was enlarged thereby.

But this was only the beginning of turbulence. Within three years thereafter three of the great European powers were actively involved in war, and from that time forward each few years saw some one or more of these greater nations, or the United States, becoming engrossed in war, either with some major dependency or among each other. It was not until the year 1871 had brought France, Prussia and Austria into a relationship which was to prove stable for some time, and had finally united the entire Italian peninsula into a single firm monarchy, that comparative peace was in sight.

In the United States we had only one war during this period, it is true; but that one was of a duration and intensity—one of the most bitterly fought and expensive wars, per capita of population involved, which history had recorded up to that time—fit to match the virtually continuous twenty years of turbulence enjoyed by Europe.

But the year 1871 formed a turning-point again into a period of comparative calm. The list of conflicts continues thereafter, but they become relatively unimportant. There ensues a long season of virtual peace extending over a quarter of a century, broken only by the minor collision between Russia and Turkey in 1877-78, the distant rumble of shock between Chili and Bolivia, or petty wars between some major power and disturbers of its colonial peace in Asia or Africa.

This was a period, in both Europe and America, marked by intense industrial and commercial expansion. France, under the guidance of Thiers, had paid off the huge indemnity required by Germany for the Franco-Prussian war, and had thus rid her soil of foreign troops, in the remarkably short time of four years. The horrors of arson and violence, famine and pestilence which had scourged Paris during the terrible Commune gave way, with the suddenness of contrast between extremes which is characteristic of all social evolution in times of national crisis, to a condition of expansive prosperity. Within a generation France, starting from a degree of famine and poverty wherein dogs and rats commanded high prices for food, had become the banker of Europe. Such is the vitalizing power of community-credit!

Simultaneously Germany was glutting herself upon the fruits of her final predominance over her ancient enemy, Austria, and her more recent defeat of France, and gloating over her newfound unity of empire. England and Italy were developing commercially in only less dramatic fashion.

In another book, wherein the natural laws underlying social convulsion and evolution may be studied in a broader way than here, it will be shown how coercive was mechanical invention, and particularly the railway and the telegraph, in forcing the political transformation of the Europe left in the hands of Metternich and Talleyrand, by the collapse of Napoleon, in 1815, into that inherited by Bismarck, Gladstone and Thiers in 1871. For the present it may be noted merely that such was the case.

TABLE 66

WARS AND REVOLUTIONS, 1850 TO 1914

Year	Countries Involved
1853–1856	England, France and Turkey vs. Russia—the Crimean War
1856–1858	Great Britain and France vs. China
1857–1858	Sepoy Rebellion against England in India
1859–1861	Italy (Piedmont) and France vs. Austria
1859–1860	Spain vs. Morocco
1861–1865	American Civil War
1863–1865	France vs. Mexico
1864–1865	Austria and Prussia vs. Schleswig-Holstein and Jutland
1866	Prussia and Italy vs. Austria
1868–1869	Revolution in Spain
1870–1871	France vs. Prussia
1873–1875	Revolution in Spain
1876	Revolution in Turkey and the Balkans
1877–1878	Russia vs. Turkey
1878–1879	England vs. Afghanistan
1879–1883	Chili vs. Bolivia and Peru
1883–1885	France vs. Annam
1894–1895	China vs. Japan
1898–1899	United States vs. Spain
1899–1900	England vs. Boer Republics in South Africa
1900	Chinese "Boxer" Rebellion
1904–1906	Russia vs. Japan
1912–1913	Balkan War with Turkey
1913–1914	Italy vs. Turkey
1914–1918	The Great European War

In the grasp of the huge, inanimate forces of social gravitation which were let loose by the advent of the steam-driven factory, the railway, the telegraph and all which came with them, the most powerful individualities in European history dwindled into puppets. The policies of Metternich, Louis Philippe and Napoleon III all failed. Those of Bismarck, Thiers, Cavour and

Gladstone won. But this was not necessarily because of any alteration in human nature within the two or three decades which intervened. It was not because of any moral or psychic superiority, nor of any more altruistic concept of human liberty, on the part of the latter statesmen, but *because the former stood for the perpetuation of the disintegrated Europe left by the reaction from Napoleon's unity, enforced temporarily by conquest, whereas the latter stood for that permanent, natural solidarity which was demanded unrelentingly by the presence of the factory, the railroad and the telegraph.*

Each of these winning statesmen was a builder of railroads and telegraphs. Each of the losing ones opposed their introduction. Invention is the overlord of modern national destinies.

For two centuries previous to the period under consideration, rising, ambitious, young Prussia had striven against the prestige and power of well-established, lordly Austria, for the dominant influence in the Holy Roman Empire. With the final evaporation of the last vestige of that Empire, in 1810, the two were free to continue the struggle as independent, sovereign powers.

In this struggle Austria chose the policy of Metternich—of conservatism, of stern repression, of rigid censorship of the pulpit and the press, and of antagonism to every mechanical innovation of the Victorian age. In one sense—that it held together a conglomerate empire now deprived of its ancient cement, the common fear of the Turk—this policy worked. But relatively to the progressive policy of Prussia (which, however far from ideal freedom of press or ballot, yet encouraged all modern arts) it failed miserably. By 1866 the contrast between the two policies had come to a head in the signal defeat of Austria. From that time forward Prussia's arrogance has known no bounds, until finally it has met in battle those nations which have been even more devoted than herself to the development of technical, political and economic progress.

Nor can the final victory of our modern ideas of democratic liberty over the cynical practicalness of the Metternich school, which we like to feel proved the supremacy of spirit over matter even in political affairs, be explained too baldly as such. For every one of the series of futile revolutions which dotted the history of Europe during the first half of the Victorian era *was imbued with this spirit.* Yet they all failed. This was because they did not yet enjoy full alliance with those tangible appliances of modern economic life, the railway and the telegraph (with all which these words symbolize), which are daily coercing unity upon modern mankind—while he struggles, as unnaturally as a salmon trying to slink downstream, to cling to his obsolete disgregation.

Peace.—In this era of peace following 1871 (1865 in the United States) vast industrial enterprises of all sorts were undertaken and completed, everywhere in the western world. Vast sums of commercial credit were evolved to correspond. But simultaneously the burden of war-credits was systematically reduced.

While this was true most particularly of our own land, it was also true of Europe. Germany alone was not reducing her military budget, in proportion to her growth along other lines; but she relied upon taxation, rather than upon credit, to support that huge military policy which had been inaugurated with such great success by Bismarck and William I in 1863.

England expanded her navy, it is true; but not in keeping with her commercial expansion, while her army remained stationary. France gradually became the banker of the world, as England had become its engineer and America its farmer. The United States paid off its war-debts almost entirely, and laid the foundations for the future transfer, in 1915, of the financial capital of the world from London and Paris to New York.

War.—But almost exactly a quarter-century after the peace of 1871 came the reaction. Prefaced by the distant and unpretentious war between China and Japan, in 1894-95, the martial tendency broke forth again in centers closely connected with the origins of world-prices and the reservoirs of world-credits. It began with our own war with Spain in 1898, continued in the Boer War in 1899 which so heavily taxed the resources of England—being even responsible for the death of Queen Victoria, it is said—and culminated in the Boxer Rebellion in China in 1900, the first military enterprise to bring the troops of the United States, of all the major European countries and of Japan into active alliance.

This last small disturbance affected almost every power in Europe, more by its political uncertainties, and by the commercial uncertainties resultant therefrom, than by the amounts of men or money directly involved. For the truth was then vaguely felt: that social energetics had ceased to be local or continental, and had become geodic. The coming League of Nations had cast its shadow nineteen years forward, as a warning destined to be as unheeded as all other warnings.

The decade following this turmoil was broken only by the Russo-Japanese war of 1904-06, as a major disturbance, it is true; but that conflict was significant not only in its recording another step forward in the scale of human and financial magnitudes of modern wars, but also in its further signaling the formation of a world-community by modern means of communication, and of the entrance of the Far East into membership therein. The treaty signed at Portsmouth, New Hampshire, failed to embody Japan's apparently sweeping military success, it is true; but this was only because that success, according to report, had been attained at the cost of financial exhaustion to Japan. Modern wars are fought with money and credits more than they are with men.

The second decade of the present century, although not yet finished, will undoubtedly stand as one of the stormiest of modern history. From its beginning it has witnessed almost continuous, bitter warfare, upon a scale affecting the very foundations of civilization. First came the Balkan Wars of 1911-12, then that between Italy and Turkey, and finally the present great world-conflict, unquestionably the most gigantic in men, money and territory involved, ever incurred by the human race.

War-Credits and Prices.—The bearing of all this upon the question of world-prices is this. The wars immediately following 1848 necessitated the diversion of men from productive into military lines and *the issue of enormous volumes of governmental credits.* Both of these processes, but particularly the latter, result in high prices. Prices in the United States were more directly affected, of course, by our own Civil War than by the European wars; but in this the conditions on the two sides of the Atlantic intensified each other.

No statistics as to the volume of these governmental credits are available—particularly since they must be reducible to a per-capita basis for useful comparison with those already adduced—because of the vagueness as to just what territory and population should be included. But it is certain that this volume of governmental credit was very great in comparison with any quantities of commercial credit then known.

There must also be considered, for America, the repudiation by the South of its portion of the cost of our Civil War, and the complete paralysis of that rich region as a producer for years thereafter. But there is little evidence that this had appreciable bearing in maintaining prices, except for cotton, rice and a few less important commodities. The South, for years after the War, had little or no money, traded mainly by barter, and consumed little beyond what was locally produced at home. But deficit in production seldom figures as an appreciable cause of high prices, in comparison with credit.

The South remained poor and unproductive, too, not because it had been laid waste; for an agricultural district like the South requires no such a slow and costly re-equipment with structures and appliances, in order to become productive, as does an industrial territory like France. Yet the South remained impoverished for two decades after 1865, whereas France did not continue so two years after 1871.

The South remained poor in money, interchange and consumption, paralyzed by its forced restriction to barter of goods for goods, because it lacked perception of the vital social importance of *credit.* It lacked the commercial instinct of the North to appreciate *the golden value of having debts.* For it repudiated its war-debts, and hence lost its credit. Money fled from its confines as a bird from a cage.

If the South had only funded its war-debts and shouldered merely the burden of paying the interest thereon, it would have possessed immediately a volume of credit, and hence of circulating-medium based thereon, which would have released its productive energies to a degree far beyond the cost of the interest. Its economic arteries would have been filled with fluid. Its revival would have been prompt.

Indeed, *the interest was all it need ever have paid.* For no commercialist ever expects to pay, or does pay, the principal of his debts. That is the last thing desired by the commercial world. He pays merely the interest, refunding the principal every time it falls due—usually with a sufficient expansion of the principal to more than cover past interest-payments.

But the trouble was that the South lacked a basis of intangible credit upon which to maintain the usefulness of its credit-instruments, had it decided to retain them. It lacked the aggressive commercial spirit of the North. The South was not merely defeated; it was discouraged. Worse than that, it was agricultural and non-commercial in spirit.

The high prices here and elsewhere about the year 1870 were plainly due to all this. The enormous issues of credit for military purposes, setting a new precedent in the finances of that day, had immediately become dollars active in the market. The volume of demand was momentarily exaggerated. Even if production had remained normal, prices would have risen.

With production temporarily decreased they rose doubly. But it is an actual fact to-day, as then, that, even when production is increasing, *if the expansion of credit proceeds more rapidly, exaggerating market-demand more rapidly than production expands, then prices rise while production increases.* This, indeed, is the modern situation.

Further, whereas commercial credits may not be issued with a rapidity sufficient to disturb prices obviously, else the securities would not be absorbed, yet governmental war-credits may be issued in tremendous volume, at unheard-of rates, yet are absorbed immediately by an epidemic of patriotism. Hence they elevate prices more rapidly and markedly, although no more certainly, than do commercial credits.

It is surprising, for instance, to find American bank-clearings in 1865 nearly as large per capita as in 1915, since the volume of transactions in commodities could not then have been more than a small fraction of those to-day, owing to the lack of modern facilities for communication. But they figured high enough then, because of the high prices, to counterbalance the smaller basis in goods. Prices were high everywhere.

In 1870 prices were high on both sides of the Atlantic. The steamship and the new Atlantic cable had then already bonded the two continents into a solidarity such as to enforce unity in economic phenomena. England had been hit by our Civil War, through the paralysis of its cotton-mills, almost as hard as we ourselves. Germany, France and Austria had each recently had its own troubles.

Peace and Commercialism.—But during the three decades of peace following 1865-70 all of these tendencies, so far as military credits were concerned, were reversed and the situation gradually mended. Men returned to productive vocations, and the rapid progress of invention marvelously multiplied their effectiveness. Governmental thrift paid off the national war-debts and *canceled the outstanding war-credits*—in contrast with commercial credits, which, in effect, are never canceled. For the time, production increased more rapidly than the issue of credit—which, last, indeed, was temporarily reversed. Production increased faster also than the growth of competitive costs, which were then in their adolescence.

Therefore throughout this entire period prices fell and wages rose. It was, in general, a period of contentment, prosperity and tangible growth. This was as true of Europe, as far east as Germany and Italy, as of America.

In the United States, after the monetary panic of 1873, there was no severe economic crisis until 1907. The years 1885 and 1893 brought minor depressions, it is true, and 1877, 1886 and 1894 witnessed huge railway-strikes—each following a depression. But these were more a symptom of the birth of the great railway labor-unions, and a re-adjustment of wages to fit the rapidly altering scale of railway-operation, than they were significant of general discontent or hard times.

Without abandoning the major position so often taken in these pages—that social discontent arises from causes which have been at work continuously since before the Civil War—yet it is still true that this long period of peace was, relatively speaking, a time of economic "catching up," particularly in this matter of outstanding interest-bearing credits—a period of recuperation from the wounds of mid-century militarism, before the pressure due to active commercialism had become severely felt. Hence prices reached their minimum about the year 1895.

The Enthronement of Commercialism.—But at this date the declining effect of past militarism became overtaken and revised by the rising effects of modern commercialism. Martial militarism ceased its sway over our lives, and gave way to our modern tyranny of commercial militarism.

For already, there was under way (as shown by Tables 26 to 32), even before the inauguration of this period of declining prices, the process which finally was destined to counterbalance and reverse this wholesome process of recovery from unneeded volume of governmental interest-bearing credits. This was the growth, as a natural product of political peace, and accomplished through active mechanical invention, *of a world-wide but chiefly American drift into bitter commercial warfare*—a warfare waged with the use of and for the control of that rising tide of inventions now beginning to flood the land, and accompanied by a flood of new commercial interest-bearing credits.

Although this tide had begun its gentle flow a century earlier, yet it was not until well along in the nineteenth century that conditions permitted it to assume, by its cumulative effects, a dominant magnitude—to culminate in the twentieth century into the counterpart of a tidal bore in an estuary, sweeping all before its advancing wall of water. Beginning with the invention of the cotton-gin in 1795, its relation to the culture of cotton forced the growth of negro-slavery into a huge, money-making abuse and coerced us into the Civil War. Beginning more broadly with the appearance of steam-power and the factory, fifty years before Whitney's cotton-gin, its relation to our broader system of economic distribution has yet, even to-day, to work out its culminating coercion of our destinies in drastic action.

For its motive force is accelerative. Both energy and resistance grow apace. From the clearing of the political atmosphere about 1870—due in this country to the close of our Civil War and in Europe to the equilibrium apparently attained between Germany, Austria, France and Italy in 1871—first invention, and then *commercialism feeding upon invention,* became the ruling forces in the guidance of world-civilization to its destiny.

Since 1900, if never before, all wars have been largely commercial in their source, the result of international commercial competition. Germany's jealousy of England, as much the fruit of the commercial expansion of both of them since 1871 as of Germany's triumph over France in that year, is as pure an instance as could be desired. *Yet none of these wars have been able to overshadow their parent—commercialism proper—in the quantums of energy involved.* Huge, costly and horrid as they have been, they yet stand as mere incidents to that greater internecine conflict called "business."

Thus, of these military wars the most gigantic specimen still remains unfinished. Its magnitude in pecuniary cost is only now beginning to appear; for the Allies, if not Germany also, are still increasing their ability to produce and consume munitions, and the bitterest portion of the war is yet to come.

According to an estimate published by the New York *Times* for July 30, 1916, the first two years of this war had already involved the issue of governmental credits amounting to fifty billions of dollars. A year later the promise is indubitable for these credits surpassing one hundred billions, and perhaps doubling that figure, before the war is over.[5]

Attempt to reduce this burden of current expenditure to a per-capita statement, for comparison with our other data, involves uncertainty; but, excluding altogether Russia's vast impecunious hordes, it still amounts to only one or two hundred dollars per citizen of the aggregated countries combined for its prosecution. Compared with the burden of credit due to the commercial warfare of recent times of political peace, which was already endured by the citizens of the United States when this martial addition appeared (as shown by Table 11), *this burden of interest-bearing credit due to military warfare amounts as yet* (1916) *to less than a ten-per-cent increase!*

The warfare of fleets and armies, huge as it may seem, is a small matter when compared with that waged between the rival corporations and competing corner-grocers, *when lumped in aggregate.* For the former fluctuates from day to day, becom-

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[5] On October 21, 1917, the New York *Times* quotes estimates made by the Mechanics and Metals National Bank to the effect that the cost of the war had already reached the sum of one hundred billions of dollars. Daily expenditures are estimated at $160,000,000. The annual cost per capita, as compared with income, is listed as follows:

TABLE 66

RELATIVE COST OF WAR, PER CAPITA

	Annual Cost	Annual Income
United States	$103.80	$385.00
Great Britain	279.60	255.00
France	180.00	187.00
Russia	36.60	40.00
Italy	80.60	111.00

On January 1, 1919, the *Times*' estimate of our total war cost was "$22,590,000,000 and still growing."

ing intense only occasionally and locally; but the latter is fierce and unremitting at all times and places. The former involves only a part of the men of military age; the latter includes both sexes and all ages above childhood. This is why the Great War has made itself felt upon our domestic affairs as little as it has, and why the advent of peace may be expected to act likewise.

Let no one deceive himself as to these relative magnitudes. At the present time England's share alone in the current expense of the war amounts to only thirty-odd millions of dollars per day, or around ten billion per year. Our own military expenditure, although profuse, cannot exceed this by more than a quarter. Yet this book's most conservative estimate of the current cost of our own internal, internecine *commercial* warfare called business (based upon Tables 38 and 39, and excluding all indirect losses) *amounts to nearly twice this fearful drain of strength!* If we accept Note 1 as our guide this ratio must be several times larger still!

From the way we feel, in spite of this current hemorrhage of economic life-blood, we may judge somewhat of what our potential strength might be, if untapped by commercialism!

The Replacement of Martial with Commercial Militarism.—Thus the social evolutionary process of the past fifty or sixty years has consisted, in the first place, in the gradual reduction of the war-prices of the mid-victorian period by the healing powers of political peace, regardless of the simultaneous but slow rise of commercialism, which was then only getting under way. But by about 1895 the latter factor had overtaken and counterbalanced the former. Commercial warfare first equaled, and then excelled, its military progenitor in cost.

Thus the falling prices first became stationary, and then rose again. Ever since that year they have been rising at accelerating rates, in parallel with the growth of every other feature of commercial militarism, at a rate unequaled by any other institution of modern civilization.

Yet now this accelerative rise in prices due solely to commercialism is to be augmented by that due to a fresh outburst of old-fashioned militarism, quite in addition to—or even as fresh fuel for—our increasing modern commercial militarism! What may not the economic tension be, after the war?

This great and rapidly growing aggregate of tangible credit-instruments, set forth in part in Fig. 1, will soon be seen to be the key to an understanding of our entire social structure, its equilibrium and its future action. Although active commercialism, or entropits, with its rapidly growing quota of direct and contributive costs, will always remain the key to the enigma of social *dynamics,* yet our inflated credit-system—essential yet delicate, forming the tremulous support for the arena whereon is fought out all this active commercialism—will always remain (until its sudden collapse) the balloon supporting our very wobbly social *statics.* Yet for this function it is now about as ideally fitted as a blimp would be as a roadbed for a locomotive!

While the analysis of the social dissipation of economic energy which was completed in Tables 27 to 47 deserves the rôle there assigned to it, as our primary guide, yet this vast, delicate credit-structure, built of swelling securities measured in shrinking dollars, must be recognized as its chief vehicle of expression. So long as commercial credit remains inflated there will be no revolution. But when it fails we must expect as sudden and spectacular a collapse of civilization as when a balloon gives way in mid-air from over-distention.

The Cumulative Nature of Commercialism.—Thus by the mere issue of interest-bearing securities, with permission to do so requested only from the bankers, lambs and brokers who constitute their first purchasers, money has been squeezed from the public, beyond any conceivable accounting of just return in the way of service, and piled in the hands of the few. These again exact from the public, in return for that necessity of social life called fluid credit, interest upon its own money, indefinitely and cumulatively.

Thus a current flood of new interest-bearing securities, most of them additional to those previously outstanding, and now amounting to from one to three hundred millions per month, is being constantly thrown upon the market—chiefly through New York City alone, which acts in this respect as the agency for the country. This constantly fluctuating, yet always positively growing and rapidly accumulating burden, is determined, as to its volume from day to day, *solely by the ability of the Consuming Public to pay these interest-charges* (*with entropits added*) *while still continuing to purchase commodities.*

This ability is being continually delicately gaged, under the principle of charging (or in this case, issuing) all which the traffic will bear. The whole machinery of stock-exchanges, brokers, tickers and hourly editions of daily journals bearing financial quotations, is but an accessory to this process of determining, daily and hourly, what burden the traffic in community-credit will actually bear.

This vast system of credit, thus growing upon us from day to day without our conscious consent, yet to the maximum of our strength to endure, is alike our support and our burden, our servant and our despot. Upon its stability and fluidity from day to day depends the ability of each workman to labor, each merchant to sell and each Consumer to buy. As conditions are now, interchange between these three elements of economic society can occur only through its delicate web of sensitive lines of communication.

Credit as the Social Catalytic.—It is this catalytic function of credit, vital in a highly specialized modern community, which escaped the keen mind of Russell Sage and gave the lie to his gloomy predictions. An adequate system of fluid credit is not only a necessity, but a powerful stimulant, to trade. False as is the plan of our present system, and burdensome, degrading and menacing as are its growing interest-charges, yet it stands as evidence that *some* system of fluid credit, resting upon a basis far outspanning any paltry fund of gold, is as essential to our national economic life and growth as unnutritive water is to the human body.

Production, in the body economic, is what food is in the body physical. But food without water would choke the individual body no more certainly than a gorged effort at production, without commensurate fluid credit—and without an elaborate system for identifying the individual Consumer for each article—would choke the social physiognomy. It is the lack of any adequate system of fluid credit, and not its element of collectivism, which marks the impracticability of socialism —a doctrine which bases its whole philosophy upon the assumption that production performed by the individual at the bench is the sole life-supporting process of modern community-life.

Modern economic metabolism—comprising within one term production, interchange and consumption—can now no longer occur through the crude medium of barter, the earliest known means for economic interaction, in primitive savage communities; nor through coin alone, the next step towards indirectness and fluidity, for thousands of years the reliance of the earlier civilizations; nor through token-money based only upon coin and bullion, as a century ago; nor even through stocks, bonds and mortgages alone, as our first modern devices for reliance upon our general wealth (as contrasted with gold) as the basis for our circulating-medium. Instead, to-day, in our vast and intricate population, covering several continents as one community, the utmost ramifications of our present credit-system—into personal notes, bills of lading, warehouse-receipts, bank-discounts, acceptances, sustained accounts, and what not—must each perform its part, quite in addition to coin, bullion, paper-money, checks, bonds and stocks, else the mill and its workmen must stand idle, the railway-trains and steamships must halt, the merchant's shutters must go up and the Consumers must starve. Every partial collapse of valuations in Wall Street has stood witness to a partial instance of this fact.

Up to the present time the usefulness of having a credit-system capable of rapid and indefinite expansion, and possessing the novel attribute of a foundation upon general wealth rather than upon gold alone, has largely counterbalanced the hideously inequitable and foolish burden of interest-charges, and combat over them, which has accompanied it. Lacking a more natural system of fluid credit, these copious outpourings of negotiable, interest-bearing, commercial securities have served our body economic as an injection of active blood—or at least, of a "normal salt-solution"—would serve in the otherwise desanguinated arteries of trade.

Indeed, it is this—aided by that invaluable freedom of trade between the several States, of the importance of which we have ceased to be conscious—which alone has enabled us to endure that growing burden of parasitical commercialism revealed by our tables of historical statistics. For the circulatory credit-function of these securities is purely a helpful one, in diametric opposition to their commercial function, namely, the extortion of interest, dividends and surplus from the Ultimate Consumer.

But the time is now perilously near at hand when this burden of accompanying interest-charges and commercial combat shall have overbalanced the good embodied in the underlying fluidity of credit. But this overbalance, when it comes, cannot appear in any gradual manifestation of distress (except indirectly, to those who have eyes to see), with a gradual adjustment to meet it calmly. Our ship of state is like a literal ship which tries increasingly to carry its freight upon the hurricane-deck, piling it up there ever in greater and greater ostentation—unable to perceive that it is just as valuable, or far more so, when hidden in the hold.

Our deck-load of commercialism, artificial antagonism, systematic display, and distortion of every civic naturalness to please the god of profits, has now all but reached its limits. When it gets too high the ship will turn turtle—not gradually, as we would fain have it do, sliding us off into a summer-sea in bathing-suits, there to disport ourselves while kind stevedores correct the list for us—but suddenly and completely, bottom up and funnels down, launching our entire deck-load of ownership-in-industry, commercial combat, congested slums and inflated aristocracy, with a pitiable escort of innocent humanity, into the deep-sea abysses of eternal oblivion.

Taxation.—But before leaving finally the topic of the cost of living, a page or so must be devoted to one simple element therein which recently has been allowed to figure far more prominently than it should. This is the matter of taxation.

A great deal of protest is heard these days against the way in which federal and local governments are run, based upon the fact that taxes everywhere are rising.[6] Editors and campaign-speakers are particularly guilty in this direction. Many a recent city-government has been installed primarily upon a demand for lower taxes.

But the economic facts do not offer any support for regarding any such a false thrift in the restriction of taxation as wise. Because this whole line of agitation is most unwholesome, in its blindfolding of the public eye to considerations of far greater importance, the facts and the philosophy underlying taxation will be reviewed briefly, before taking up the subject of unemployment.

The prime fact underlying an understanding of the problem of taxation is that *the Ultimate Consumer is the sole payer of all taxes.* All taxes paid by any corporation or businessman are always charged up as one of the "costs of doing business," a profit then added, and finally the whole collected from the Consumer across the shop-counter. The complaint of any

[6] Reference is had here to normal, pre-war conditions.

business against high taxes has no foundation whatever. The business does not pay the tax; it is its Consumers who do so.

The fact of next importance is that taxes are always—supposedly, at least—*spent to aid the life-support of the Ultimate Consumer.* That is to say, governmental officials at least pretend to spend the money entrusted to them for the benefit of the tax-payer; and the bulk of it is so spent. There is very little pure graft to-day, relatively to modern scales of business.

But the businessman, on the other hand, makes little or no such pretense. The open aim of business is to fight one's competitor, to "get the business" (whether it be to the public advantage for him to get it or not) and to make profits or dividends. There is no positive denial—although plenty of disingenuous concealment—of the making of profits and dividends, and of the diversion of the Consumer's money into "costs of doing business." There is plenty of indignant asseveration of the righteousness of profits and dividends; yet a most peculiar reluctance to permit the public to know whether they exist or not, or how they have been secured.

That is to say, public officials start out to spend the people's money for the people, and succeed fairly well. Commercialists start out to line their own pockets at the people's expense, and succeed fairly well. The fact that the latter do not succeed altogether, because obliged to divert some of the Consumer's money into supplying him what he wants, should not be charged up against the commercialists too severely. It may be the fault of weak human nature, but it certainly is not that of the system under which the commercialist works.

Now all monies, whether spent across the shop-counter or paid in the form of taxes, which further the life-support of the Ultimate Consumer *cannot elevate prices. Inevitably they lower them.* That is the only way in which life is facilitated in the economic world, and all facilitation of life lowers prices.

Therefore no commercialist can urge his payment of taxes as an excuse for his charging high prices. The more he pays in taxes the richer is every citizen in governmental aids to life and production, and *the less will become the natural cost of his produce.* It is only because the commercialist's produce is not sold at natural cost that he has to raise his price as he pays more taxes.

If, as he alleges, he finds his costs rising as he pays higher taxes, it is because he has allowed commercial costs to add themselves increasingly to natural costs, in the businesses contributory to his own, faster than increasing taxation has reduced natural costs; and for that fault he is more reprehensible than is any other class of society, because he knows the game better. *It is as a Consumer, and not as a purveyor, that every man carries his heaviest social responsibility.* For his production is largely an individual act, but his purchases are purely social ones.

Then if, as he also alleges, taxes are largely misspent, his obvious remedy is not to cut down the taxes, but to contribute his superior ability toward securing their proper expenditure.

Conversely, all monies, whether spent across the shop-counter or paid in the form of taxes, which are diverted into waste, whether commercial or political—profits, dividends, advertising, graft, lobbying, etc.—*inevitably become the source of high prices.* For the Consumer, before he can acquire commodities, must pay their natural cost plus this tax, tribute or waste.

Therefore the question to be answered to himself by every Consumer and tax-payer is this: In the payment of taxes to the government, both public opinion and the law dictate their expenditure wholly for my good—except in so far as they are devoted to the payment of interest upon bonds. It is true that to some slight degree human frailty may defy these considerations, and may waste a part of the money; but in major part it is well spent in my interest.

But, on the other hand, when I pay money across the shop-counter to a commercialist, *both public opinion and the law uphold and encourage him in his waste of a huge and increasing fraction thereof, in the form of profits, dividends and the costs of competition.* In which direction am I more likely, therefore, to receive efficient return?

The choice of every sensible man must be in favor of spending his money in the form of taxes; for in the business-world the Consumer's money is always spent *just as inefficiently as human nature will tolerate—namely "all the traffic will bear."* The efficiency maintained *within* the privately owned factory or office, by the policies of commercialism, is of course very high. But of what good is this to the Consumer, when the inefficiency of every transfer of either goods or money *between* said factory and the Consumer is already appallingly low, and is rapidly decreasing?

Moreover, the public expenditure of the Consumer's tax-money is at least partially under his control. But, should he wish to investigate the efficiency with which his shop-counter money is expended by any commercial organization, he finds that he possesses no legal right to force open a single ledger. It is all "private business"—although he has contributed every cent hidden within it coffers!

In comparison with such economic despotism as this, taxes which might be spent by a political government with an efficiency as low, let us say, as seventy-five per cent—with only one-quarter wasted in graft—are a veritable bonanza to him. For he has at least some chance of raising that figure. But in the commercial world the efficiency in terms of the Consumer is already as low as twenty per cent, and is rapidly growing lower; and over its further fall the Consumer has no control whatever!

Because of the modern growth of populations, and of the facilities for transportation and communication which cement them daily into greater solidarity, the whole trend of modern affairs is toward the government's assumption of services and responsibilities which previously were individual. This process is not proceeding at anything like the rate of growth of commercialism, and commercial decentralization, but it is proceeding. That which was everybody's or nobody's business yesterday has become to-day a vital factor in the lives of millions.

Therefore the proportion of our annual expenditures which are collected in the form of taxes, rather than across the shop-counter, naturally should increase, and without protest on the part of the tax-payer. Nevertheless, in deference to a wide-spread prejudice against taxation, and to show its true relation to our commercial burdens of tribute, Table 67 is inserted here to show the percentage of each Consumer's mean annual expenditure (as taken from Table 43) which goes to pay taxes. The data are available only from cities of a population of 30,000 or more, and are given here only for the year 1915—at which date the Consumer was being obliged (as shown by Table 45) to divert at least 49 per cent of his total expenditures across the shop-counter into tribute to commercial anarchy;

with a probability, as shown by Note 1, that this waste actually runs as high as 70 or 80, or even more, per cent.

The middle column of Table 67 shows the total political revenue, including that derived from fines, forfeits and escheats, from subventions, grants, donations and pension-assessments, from highway-privileges, rents and interest going to governments, and from earnings of general departments and public-service enterprises, as well as from true taxation. The last column gives the portion of this which is derived directly from the Consumer, in the form of property and other taxes, and by special assessments.

TABLE 67

PERCENTAGE OF PUBLIC REVENUE AND TAXES TO CONSUMER'S TOTAL EXPENDITURE PER CAPITA PER ANNUM, 1915

(Consumer's Total Expenditure, $403; Tribute to Commercial Anarchy, $198)

Size of City	Total Revenue	Direct Taxation
30,000 to 50,000	5.52	4.25
50,000 to 100,000	5.35	4.09
100,000 to 300,000	6.36	4.92
300,000 to 500,000	9.21	6.98
Over 500,000	8.70	6.68

With only five or ten per cent of our money paid as taxes to our political governments, which unquestionably spend the greater part of it for useful purposes, there is little ground for complaining longer about taxes, while swallowing without protest our gigantic commercial tribute in the form of interest, dividends and contributory costs, *not one cent of which comes back to us in any useful form.*

Moreover, Table 67 applies only to dwellers in town, whereas it is unquestionable that the country-dweller pays less taxes. *But the country-dweller pays the same commercial tribute as the town-dweller.* Since Table 17 shows that the proportion of the total population dwelling in communities smaller than 30,000 people varied from about 91 per cent in 1850 to some 67 per cent in 1910, it is probable that the average Consumer pays out not over three or four per cent of his total expenditure in the form of taxes, *whereas he pays at least 49 per cent, in 1915, and perhaps 81 per cent, in the form of commercial tribute!*

Table 41 also corroborates this view, by showing that the proportion of governmental (including State, county and municipal) indebtedness to commercial indebtedness varied from 4.7 per cent in 1880 to 3.0 per cent in 1910. It is probable that the net rates of interest on the two sorts of debt are much the same.

Table 67 therefore gives the lie to one of the most common, and to the serious-minded citizen the most exasperating, of all the tricks of the politician of the day, in his efforts to please his true clients, the commercialists: That of appealing to the voter as a tax-payer to keep down taxes—or to commission him to do so—*at the price of arrested public works.* But his appeal is based upon the most short-sighted parsimony, and paralyzes that most important of all sorts of progress in civilization, namely, the increase of public activities as people come to live in larger and larger, and more congested, communities, cemented ever more closely by improving facilities for transit and communication.

The present policy of the average tax-payer, in voting into office those who promise "economy in public expenditure" when what the tax-payer most needs is a continual expansion of public expenditures—while this same voter ignores the far greater waste of his money through commercialism—reminds one inevitably of him who "blows in" thousands for champagne-suppers and then calls upon his wife to make it up by economy in the use of soap.

PART IV

SOCIAL REACTIONS

CHAPTER XX

UNEMPLOYMENT

WE have now all but completed the review of the economic anatomy of society, in its most material and mechanical, but its dominant, sense. For, just as no artist can portray the draped figure with success without first knowing the skeleton, and secondly the nude, so it has been proper to place first in this analysis of our social physiognomy a study of those rigid, statistical bones and unattractive organic definitions of the body economic which have always given to the study of political economy a repulsive aspect, yet with which we have been forced to fill the earlier portions of this book.

But the next step is to clothe these things with some living beauty of rounded flesh and grace of motion—to connect this mechanical anatomy of production, trade, competition and credit more directly with human life and happiness than has yet been practicable. In order to do this there now remains only one additional factor to be considered. This is the topic of *employment and unemployment.*

This factor is the prime connecting link between our relentless economic environment and the ethical results which give evidence of what it has molded us into, socially speaking. No person may lay claim to any understanding of the predictable workings of social evolution who has not grasped this matter of unemployment, as a natural feature of our social metabolism.

The Source of Economic Power.—In these foregoing pages the Ultimate Consumer has been granted his fullest conceivable rights (in his capacity as purchaser) as inborn sovereign over all those whom he hires, as he buys, to supply him with what he selects. But the Consumer cannot be a purchaser at all, in any stable sense, unless he first enjoys employment.

The first measure of the economic perfection of a nation is the degree to which each dollar buys its full value in the open market; therefore this topic has properly been placed first. But only second to that, as a measure of the civilization built thereon, is the *certainty, continuity and justice with which that nation awards or permits employment*—distributing it with the utmost liberty of choice on the part of the workman, and with justice of reward and freedom from oppression, yet most rigidly requiring productive effort as a prerequisite to purchasing-power.

The right to regular employment is one of the basic rights of man. It is so because activity is as normal an essential to the pursuit of life and happiness as is food, rest or legal justice.

During the various periods of human oppression in past history no adequate statement of this basic right of man has ever been voiced, because that particular species of oppression has never before prevailed, as an institution. Under serfdom, slavery, feudalism or any other politically oppressive system of the past, which repressed labor by tying it to a given locality, there has never been any complaint of unemployment.

It was only as the peasant became freed from the soil that he became the slave of unemployment. With the relatively novel license of every man to roam the land in search of the task which pleased him best, came simultaneously the irresponsibility of the employers for the engagement of all who might present themselves for work.

Later on, as opportunity developed, this same liberty of choice has led labor, in increasing numbers, to the selection of the more lucrative occupations of commercialism, in preference over the more poorly paid productive ones; and this, we shall see, results in a further general deficit in demand for work on the part of the employers.

The revolution of 1848, which was the first one of magnitude to be instigated chiefly by modern economic conditions, as the result of invention, was the first to give articulate voice to the demand for employment. But this revolution, however economic it may have been in part of its motives, yet fretted primarily against bonds which were purely political in character, however sanded with economic irritants. For even when this revolution had accomplished its utmost aims, some quarter-century later, political liberty was all that had been attained. Even to-day economic liberty and democracy yet lie wholly in the future.

But not until political liberty had been attained could commercialism be fully free to grow, and not until it had grown apace could the problem of unemployment develop into an issue competent to force or guide a revolution. For unemployment is as modern a disease as is appendicitis or poliomyelitis. It is the result of modern commercialism; and the latter is the fruit of modern political liberty, coupled with modern invention.

Thus has arisen gradually from the depths of history what is obviously, to anyone who investigates impartially, a great wrong—the invasion of a basic right, the right to exert oneself in one's own behalf. So far as conscious, individual factors are concerned in the coming crisis (where they must always play a secondary rôle) this wrong is destined to form the pivotal feature about which dizzy events shall whirl.

Unemployment and the Will.—The widespread idea that idleness is always voluntary, or is at least due to a lack of enterprise in search of work, need not detain us long here. The idea is too superficial as to the facts of the situation, and too impotent in its explanation thereof. *It is too lazy itself*—a lazy mind's easy way of shoving off onto others its own responsibilities.

That there are always some among the idle who prefer to be so, is not to be denied for a moment. But the fact is not of the slightest help toward understanding a single case of involuntary unemployment.

The social science which can find no explanation of laziness but to leave it as disposed of by calling it "original sin," or individual whim, may lay no claim to consideration by serious minds as real science. It deserves only the rich irony of a Dean Swift, who marveled at the acumen of the scientists of his day—shown, when confronted with some freak which no one else could understand, by their identifying it immediately as a *"lusus naturae"!*

But modern science has, or should have, no use for any such cheap and lazy royal roads as that—of explaining unemployment as due to original sin, or individual whim, or perversity, or as a freak of any sort. Science demands an explanation of everything *as a natural phenomenon, the effect of an adequate cause.* Unemployment, however difficult a problem, must be just that, or else it lies in the realms of the supernatural.

It is so obviously a morbid phenomenon that it can lead only to the query: Why can this be so in sporadic cases? For a person who does not enjoy work is plainly just as abnormal as one who does not enjoy food or sleep.

There is indeed no problem in all social science which requires such careful procedure on the part of the student as unemployment. For on the one side is the minority of the unemployed which does not wish to work. On the other is the majority—indubitable to everyone in touch with real social work—which does wish work but which cannot get it.

Every investigator knows this to be a fact. Its existence is proven, if by no other fact, *by that surplus of labor which presents itself in response to every advertisement of opportunity.* For the ratio of number of applicants to those wanted is always greater than unity, varying from two up to fifty or more.

This fact cannot be dismissed with a wave of the hand. It is universal. It is unnatural. It is abnormal that men should have to seek opportunity to work; still more so that there should be difficulty in finding it. We have become so accustomed to this ugly distortion of the natural social relationships that we have ceased to recognize it as the deformity which it is. We badly need to realize that *every surplus applicant turned away from a job is an instance of forcible unemployment.*

It is not enough to say that these surplus applicants are incompetent. Why are they incompetent? Or why, if they are competent only for lower grades of work, are they wandering aimlessly in search of work beyond their caliber? For again, there are too many of them, everywhere, to be dismissed with the words "ignorant whim" or "over-ambition."

Or, if they should return to these lower grades of work, *will they find there a full demand for their efforts?* Everyone acquainted with the facts knows that they will not. The deficit in employment is as obvious in the lowest grades of labor as in the highest. The percentage of unemployment may be even higher in the lowest grades.

Nor, on the other hand, does this fact explain the mystery, by extending the hope that society wants only the best of work done, and that "there is always room at the top." In general, the deficit in employment is indifferent to level of ability. It is the cultivated classes, often, which suffer the most from unemployment.

Unemployment, however, is markedly dependent upon *sort* of ability. There is almost always a demand for commercial, combative, selfish or wasteful ability. It is the opposite from these which suffer.

For the most painful deficit in demand of all appears in those higher grades of productive ability which are of the very greatest value to the community—or which would be so, if once released into activity by adequate reward. These are the creative intellectuals—the students, writers, teachers, inventors, discoverers, artists, composers, preachers, etc.—those who have traditionally lived and worked in poverty, died in obscurity, and then been exploited for decades or centuries after their deaths, by every dead-beat businessman who found any use whatever for their ideas in the furtherance of his private profit-making. For there is not a furnace which could heat, nor a wheel which could turn, in any factory in the land, were it not for knowledge accumulated in the past, and dedicated freely to mankind by these people, without society's having even repaid them, during their lifetime, with a steady job at scant wages.

It is this universal deficit in demand for productive ability—sufficiently marked in the lower grades of ability to negative the idea that labor is creating this deficit by its own too great ambition, and enough more so in the higher levels of ability to negative the opposite idea, that labor is creating it by too little ambition—which constitutes the gravest problem of the day.

Incompetence! Where?—We are driven, if sincere, to inquire whether it be not the employer, rather than the workman, who is incompetent, in that he cannot administer more responsibly that function of "employer" which he has assumed gratuitously, quite without call or warrant from society to do so. For it has already developed that the wages paid are utterly incompetent, when translated into purchasing-power, to equal the value produced. Why may it not be the job which is incompetent, rather than the man?

When the real explanation of enforced idleness—commercialism—has come to be understood, it will be plain that those who do not wish to work are merely those, or the descendants of those, who for generations have found life presenting to them the alternative between either too much work or no work at all—and always insufficient reward. These have developed into harmony with their environment just as naturally as any other form of life. They embody the inevitable result of generations of irregular employment, overwork alternating with complete idleness, diluted purchasing-power, and that malnutrition of body and soul which all these enforce, namely, *sheer laziness.* Idleness, by forced repetition, will become as instinctive and uncontrollable a habit as well as any other. The instinct of industry, as well as a muscle or a gland, may be atrophied by disuse.

It is certain, at any rate, that those who do not desire work are not to be found among the surplus applicants for advertised jobs. Their very presence in the miserable queues of seekers after work proves that.

Rights of Man.—Thus this great modern wrong—the fruit of recent expansion of invention, and of commercialism parasitical upon invention—creates a need for a new statement of the Rights of Man. This new declaration must include his Right to Employment. *The guarantee of an economic system which will automatically grant employment to each citizen who may prefer work to want, is one of the heaviest and most elementary responsibilities now resting upon modern society.* Nor does this mean any childish policy of forcing unneeded public works, just in order to supply jobs. The forcible expansion of public works, to be paid for from taxes, does not even scratch the surface of the problem of unemployment. It does not increase by one penny the current demand for labor. History has proven this time and again.

What is wanted is an *automatic* assurance of a continuous demand for more labor than presents itself. The jobs should always, automatically, be in excess of the applicants, just as at present the applicants are always, automatically, in excess of the jobs. Naturally this is so. All we need to do is to remove the artificial distortions, and then have faith in God, nature and man.

As an ethical preliminary to this properly automatic economic system, the present employers of labor should be held in the same glare of public responsibility with our judges upon the bench. They should never be allowed to evade their responsibility for the current demand for labor in the guise of private citizens. They are our most important public officers, holding the stability of our entire social structure in their laps; for the first fruit of enforced idleness, or irregular employment, is bitter discontent.

Individually, of course, each employer is now helpless to remedy unemployment. Each can hire only those whose labor his market demands. But as a class—properly, as a profession—they should be held strictly accountable for a frank, public admission of the universal fact of a continual deficit in employment, and for denouncing its cause—commercialism. This remains so even if it does demand the best intellect in the land to explain the details of that cause, and the entire power of the state to remove it.

For there is no form of oppression in human life so demoralizing and degrading, so productive of crime and suicide, so sure to react upon the welfare of society with its unreasoning bitterness in a thousand different ways, as enforced idleness. Enforced over-work, as in slavery, is far preferable. On the other hand, there is no feature of social metabolism which leads so directly to the elevation of national ideals and popular accomplishment as the certainty, amongst all classes of population, of continuous, justly paid work.

America has grown to what it is upon these facts. Its best traditions of the past are founded upon the latter; its worst problems of the present day upon the former.

Our poor now need greater certainty of opportunity for work, at reasonable hours and pay. Our rich need a greater necessity for work. The two huge ethical or psychological problems of the day are the bitter vindictiveness of the lower classes and the equally unpatriotic superciliousness of the upper classes. Both of these are the inevitable products of the current deficit in employment.

It therefore becomes of prime importance to inquire with scientific care and impartiality just how far the individual, and how far the lack of organization of our economic society, may be responsible, and in what direction, for that *enforced idleness* which, in larger rôle than its infantile offspring—

voluntary idleness—is now rapidly becoming a menace to our social stability, at both apex and foundation of modern civilization.

Efficiency in Social Hiring-power.—Let us imagine an entire community organized as an actual, modern factory, and producing (along with the usual technical output of machinery, textile goods, or the like) everything needed by the workmen-citizens to support life. Let it also be supposed that these Workmen-Consumers purchase from this, their own factory, all which they consume in life-support, and that they absorb the entire output of the factory in this way.

Let us imagine this factory as charging the Consumers—after making good its depreciation of plant, insuring life and property, providing a margin of tangible stock for the expansion of its facilities, and a suitable sinking-fund of credit to insure fluidity—only cost for the goods. This is the Natural Price. This it does through that same statistical Central Office which now oversees all interchange between department and department, or workman and workman, in every factory to-day. There is no profit abstracted and divided, no commercial competition (although endlessly free and fully rewarded emulation), nor any dividends distributed, nor rent nor interest paid to outside owners.

All that is easily attainable upon a national scale to-day, in our own economic community, *under the direction of those who now conduct our present factories,* if we can but persuade them to expand the existing factory-system to include all active people, with the simultaneous prohibition of all ownership-in-industry. Such, so far as light yet penetrates, would be the complete and perfect economic system, operating at an efficiency of organization of one hundred per cent.

Imagine, however, instead of any fantastic substitute for our existing currency, that these men and women are all paid their wages in money, as now, and that they buy their goods for cash. Or one department of the factory may be a savings-bank, backed by the wealth of the entire factory-community, upon the books of which wages are entered as credits and purchases charged as debits. This or cash would be a matter of convenience.

Again, the control of the factory is vested, not in its members when acting as producers, but *in those same persons when* *functioning as Ultimate Consumers.* The vital contrast between these two arrangements will be explained later.

The 100-per-cent Community.—Such a factory-system community would then comprise all of what our present commercial system is supposed to be, but is not—namely, one designed for the good of the community. For all its parts would then be organized primarily with a view to:

(1) The *interchange of goods,* during the many processes of their manufacture, with the maximum of ease and directness, through community-credits in the form of factory-requisitions.

(2) For the unlimited *extension of credit to individuals,* but solely in the form of appliances granted to him for use for society's good; and this credit would be based upon the general wealth of the land, and upon the user's productive ability, rather than upon some hoard of all but useless gold, or upon the individual's ability to extort profits from his fellowmen, as now.

(3) For the *sale of finished goods to their Ultimate Consumer at their natural price—factory-cost.*

(4) For the *hiring of all labor offering itself.*

For there is no limit to human demand for productive labor. The only limitation now is in purchasing-power. But then purchasing-power would always be equal to productivity, because no artificial deficit would then be created, during the transformation of one into the other, by the dissipation of energy in commercial antagonisms and duplications. Therefore the simple fact that every new pair of hands, in seeking labor, brings with it a back to be clothed would then reign in undimmed supremacy.

The vital distinction between the employer of that day and the present one is that he would then be purely and openly what he is now in a concealed, disguised, ashamed-to-own-up-to-it way—the salaried agent of the Ultimate Consumer. Then he would pass on to the producers every cent of demand expressed by the Ultimate Consumer, whereas now he passes on but a small and decreasing fraction thereof. For then his own emolument would constitute no deficit in this purchasing-power, as is usually the case now, because then his own efforts would be productive, instead of combative, as now.

The vital distinction between the factory-requisition credit-instruments of this 100-per-cent community and those upon which we now rely for our extensions of facilities and our current financing of the employment of labor—commercial securities—is that, whereas our present ones are accepted as a circulating-medium *only to a valuation proportional with their exaction of dividends from the community*—their value as social life-blood being quite ignored in case of a lack of extorting-power—these factory-credits bear no interest at all, but perform their proper function, interchange, perfectly nevertheless. Their valuation is based solely upon their valuable fluidity.

This is just the way in which we use cash in our everyday transactions. It bears no interest. We do not care a hang about the gold stored away in somebody's vault, upon which the value of the cash is supposed to depend. We value the cash only because it will buy things.

That the gold is a necessary measure of this ability to buy things we have freely admitted. But that it is a crass failure in completely performing this function is proven by the monthly decrease in the ability of cash to buy things, while its gold-basis remains unshaken.

The Natural Economic Society.—Under such a system as we have imagined, the exchange of effort for money by the laborer, or of money for commodities by the Ultimate Consumer, must then always bring to the individual the true economic equivalent of his actual productive effort and ability, *at 100 per cent efficiency of organization and exchange;* because everyone in the factory-community is occupied with helpful, productive tasks, with no energy wasted in bargaining, etc. In such a community each dollar expended across the shop-counter would then buy a true dollar's worth of life-support.

Conversely, each worker would then find demand for at least 100 per cent of his true productive ability. The words "at least" refer to the fact that the natural condition of biologic growth, *if not interfered with by artificial obstacles, is one of a continual expansion of demand beyond the existing ability to fulfill it.* The contrasted economic condition which is now all but universal with us, of a deficit in demand below the ability to perform, is, to well informed minds, a monstrosity so great as to diagnose immediately a deep pathological condition of society.

Dependents and Independents.—In such a community the individuals who happened to possess less than the average productive powers, even including the idiots and imbeciles, would then form no burden upon the community, because society would find in the idiots themselves a demand for their simple abilities, and a supply for their simple demands. Their income, modest though it might be, *would be exactly commensurate with their simple wants,* and it would be certain.

This would be so merely because society would then provide means for their interchange with the rest of the world at an efficiency of 100 per cent. We now perform this interchange, in our actual civilization, at an efficiency averaging some 19 per cent—when including in the average with the idiots all the ablest folk in the land.

As for those who happened to possess greater capabilities than the average, they would then automatically enrich the community in equivalence with their larger abstraction and consumption of goods. They would then no longer be, as now, a burden upon society far more puzzling and threatening than are all its idiots, imbeciles and insane together.

Insane Economics.—Let us now imagine that the salaried superintendent of our 100-per-cent factory-system community—its highest controlling authority—should suddenly become insane over a supposed improvement in the way of conducting the work, and that his community did not immediately perceive his mistake, but followed him faithfully in his fad. Let it be supposed that he detailed one-fifth of his total working-force of brains and brawn to build a high, gateless wall about the factory-premises, with similar walls between each two departments or shops.

Everything then entering or leaving the factory, or needing transit from one department to another, must be lifted over these walls. This task is also a part of the duties of the one-fifth, and for their aid is detailed one-fifth of all the cranes, trucks, power-supply and other appliances of the factory.

We ourselves know, without need for debate or proof, that this policy was really that of an insane man, and that by it the productive efficiency of the factory could by no possibility be enhanced, but must be reduced at least one-fifth. For at least one-fifth of the factory's energy is dissipated at the walls. But this figure makes no allowance for the manifold delay and discouragement of those who remain at bench or machine, due to the walls, but takes cognizance merely of the diversion of labor from production to wall-building and hoisting. Yet, in our imaginary factory, we must suppose implicit faith on the part of the entire community that this over-the-top method was the only wise way of conducting interchange.

Purchasing-power and Hiring-power.—It is now important to investigate the effect of this strange, imaginary faith and policy upon two important things, namely: (1) The purchasing-power of the dollar, and (2) the demand for productive labor.

The aggregate money handled by the community has not been affected by the new policy. There would now be just as many dollars on hand, but each gold dollar would now require one-fifth more exertion to extract it from the soil. Hence prices will all have remained unchanged.

But the difficulty in acquiring purchasing-power has increased. The gold dollar, while still a hundred-cent dollar in terms of exertion required to secure it, *has now become an eighty-cent dollar in terms of the life-support which it can command.*

Again, the purchasing-power being now reduced by twenty per cent, the demand for produce would be reduced by like fraction. Yet, since the factory is now working at only four-fifths efficiency, this demand would still be for its full possibilities. All would still be employed.

Further, since it has been assumed that the workers at the wall received the same rates of wage as those of equal ability elsewhere in the shop, all would feel an equal demand for their labor. Only, consciously or unconsciously, the community would be suffering from a twenty-per-cent deficit in sustenance. Although it could not understand what was the matter with itself, yet the fact would be that it was not fully nourished, as before, into equilibrium with its natural productivity. It would not possess the same margin of vitality for meeting emergencies, nor for progress in civilization, nor for the maintenance of moral or ethical poise. Its members, while ignorant of what was wrong with them, would be found somewhat prone to disease, to discontent, to pessimism and to various destructive philosophies, in place of that universal cheery, healthy content with life which prevailed in the factory-community before the new policy was installed.

Class-Dominance.—But it is inevitable that this assumed equality between the several classes of workers could not prevail in actual life. Disparity between the wall-workmen and others must develop. For it would soon become plain to all that *no work could be done inside the factory, nor any of its produce consumed outside, without the activities of those at the walls.*

This being so, abilities peculiarly adapted to hoisting would inevitably command a premium. Wages for hoisting, in view of the artificial estimate placed upon this sort of work, would become higher, for the same rank in individual ability, than for productive work inside the factory.

The explanation, we now can see, would not lie in the superior general ability of the individual hoister, but *in his possession of ability in a peculiar line, which was not, in reality, useful at all, but rather destructive.* The thing which imparts this higher valuation to the man is a sheer public delusion. Yet it is just as effective, for all that.

Thus it would be said among these imaginary people that so-and-so was a man of very great productive ability, and deserving of a very large income, *because he could hoist;* whereas the fact was that so-and-so possessed no useful ability at all—or at least, produced no useful result—his "ability" consisting primarily in *unusual shrewdness at selecting a line of effort upon which, whether productive or destructive, his fellowmen believed themselves to be peculiarly and acutely dependent.* Yet this abject dependence of the entire community upon so-and-so's ability as a hoister rested upon nothing more substantial than a widespread delusion!

Thus the hoisters would soon learn that, whereas no other workman nor trade inside the factory possessed any advantage over any other—greater skill, greater need and greater wage being always automatically balanced—yet that *they themselves did possess such an advantage.* For no man inside might work, nor any man outside might eat, except as they worked. Indeed, they would merely have to sit and idle, and the rest would clamor for the resumption of their work, and would offer for such resumption prizes quite in addition to the standard wage.

"Better a half-loaf than no bread" would inevitably become the motto of the insiders. "Charge all the traffic will bear" would as quickly be adopted by the hoisters. Their policy would soon adjust itself into a crafty medium—enjoying part idleness on the extra prizes wrung from the hardships of the inside party, while neither permitting the latter its natural activity without restraint (else it would grant no prizes), nor yet so throttling it that it had no extra strength with which to supply prizes.

Thus the wall-hoisters must soon develop into a special class, regarded with a sort of veneration (except by the minority which sees through their fraud), accorded special privileges and given unusual rates of pay.

Then, further, not only must the hoisting itself be done in full volume, in order to permit current production, but the walls themselves must also be extended, raised, multiplied and repaired. Instead of anyone's seeing that the first proper task was to tear them all down, popular superstition, guided by the gravest heads in the land (and fostered by the wall-builders as sedulously as superstition has always been fostered by the priesthood parasitical upon it), would hold that their continual exaggeration was a sacred duty in the interests of industry.

For do not the walls "earn" big incomes? And is this not so because no one could labor or eat if activity at the walls should cease?

Guilds and Aristocracies.—Thus must arise inevitably a whole aristocratic trade or "Guild of Wall-workers." Further, since pecuniary profits always lead to honor, there must also arise, through the aging of the active wall-workers and their natural desire to retire into luxurious leisure, an honorary caste of "Custodians of the Wall," from whom no effort is required, but to whom liberal income is allotted as a feudal right. Thence it is but a step, as the generations pass, to permit the first-born to inherit, unearned, this special privilege of income in idleness.

In such a situation as that, as everywhere, the ethical standards of the community must be in accord with its economic beliefs. Public opinion cannot be imagined as recognizing the hollow fraud. From our modern point of view, only the most medieval stupidity and superstition could blind the factory-community to the truth. But we have assumed in our imaginary community a grade of intelligence unable to recognize the obvious.

Delusion Begets Delusion.—So the wall-workers, finding that, as a matter of fact, productive labor proceeds or stops as their acts permit, must soon gravitate into the mental attitude of holding that *they actually grant, or even create, the opportunity for employment* on the part of the producers; and in this our imaginary public opinion—instead of realizing, as we do, that they only hindered employment—would follow them without question. It could not realize, as we do, that it was only the productive members of the community who were creating opportunity for interchange, consumption and purchase, and hence for employment.

The Sovereignty of Interchange or Purchase for Consumption.—But it is plain that, even in an ideal community it is not even the producers who create employment for others *by their productive acts alone.* Such acts might feed the actors themselves, although only meagerly in comparison with modern standards. But in a modern society, with its complex tools and enforced specialization, it is only *an equitable interchange of equivalent values, promoted solely by desire for consumption,* which affords employment and forms the true cement of social, economic solidarity.

Such an interchange of equivalents occurs, as to employment, *only when the producers of actual value appear in the market as Consumers. It is only the Ultimate Consumers who hire.*

But it is only when the Ultimate Consumer is also a producer that he pays his bills—in purchasing-power, at least. For the Consumer who pays his bills in money which his own acts (or idleness) have served to dilute in purchasing-power, is just as surely a dead-beat as the Consumer who doesn't pretend to pay his bills with any money at all. Both of them are just as much swindlers, in effect, as he who pays his bills with counterfeit money.

It is only as a producer becomes a spender, or an Ultimate Consumer, in the open market—or as a spender has previously been a producer of true life-support for others—that demand for employment arises. *All employment is created only by production followed by purchase. All deficit in employment is created by non-production, whether active or idle, followed by an artificially granted purchasing-power.* The truth of this will appear gradually, as the analysis proceeds.

But to the inhabitants of our imaginary factory this silly fiction as to the creation of employment, and the "giving" of jobs, by a portion of the community which creates nothing, would appear as solemn and sacred truth. Once grant their basic veneration of the tragic fraud involved in the accepted presence of the walls, and almost any silly vagary becomes a natural consequence.

For the truth is that it is the people's *unemployment,* rather than their jobs, which they owe to the wall-people. Assuming, for the moment, that disparity of income between the producers and the wall-workers, as classes, has not yet arisen, the real demand for the services of each person, expressed in purchasing-power, amounts, on the average, to *only four-fifths of his normal productive power*—however unconscious of the fact he may be. That is to say, the real, physical demand for the best work of any citizen-worker is always incomplete, by the proportion of total energy wasted upon walls. But of this fact he has only indirect evidence, which he fails to understand.

Real and Imaginary Demand.—This sort of deficit is due to the fact that there is no physical, natural demand for the work of the wall-people. The demand for the wall-work is merely a hollow *pecuniary* demand, based upon delusion rather than fact. It is only the services of the producers which is in real, physical demand, because this alone supports life. Yet this sort of effort enjoys only four-fifths of the total pecuniary demand. Hence the universal deficit, in both employment and subsistence, of twenty per cent.

Yet, under the momentary assumption of equal importance attached to productive and wall-work respectively, the line between the two sorts of demand has been erased, for the purposes of the argument, and the twenty per cent deficit in real demand has been spread evenly over the entire community, disguising the eighty per cent of real remainder as apparently a full demand for each person. Such is the disguising effect of a fluid circulating-medium in an intricate society. But, because all are in the same boat, *the deficit is felt only subconsciously.*

The point to be driven home here, before we proceed a step farther, is that, even under the assumption of equal distribution, the real unemployment due to the wastefulness of the walls *already exists throughout the community, in the form of a fractional unemployment for each individual;* but it is subconscious because equally distributed, and therefore is accepted as natural. It is fractional for each person only because it is equally distributed.

It requires the additional factor of *disparity in rates of income* to make the community conscious of its deficit below full employment, by its creation of a corresponding *disparity in unemployment,* with its consequent concentration upon one individual or another to a degree contrasted with his neighbors.

The Inevitable Result of having Walls.—For just as soon as public superstition might accord to wall-work an importance superior to production—which must be inevitable as soon as the wall-workers perceive that production can proceed only with their permission—then this deficit in employment will no longer be evenly distributed, no longer always a minor fraction of the individual's productivity, and no longer disguised into subconsciousness.

For now the wall-workers, on the one hand, find the demand for their services exaggerated not only from eighty to one hundred per cent of full capability, but far beyond. Some find that their existence is in high demand, commanding a generous income, without regard to whether they do any work at all or not.

But even if the wall-workers have to work very hard, and even if the demand for their work is merely one hundred per cent, this fact immediately confronts the partially employed producers with a contrast which they did not before perceive. *They become conscious of a disparity in opportunity.* Whereas the wall-worker enjoys a hundred-per-cent demand for his labor, the producer enjoys only an eighty-per-cent demand, or less.

On the other hand, the producer-class has now had shifted back upon its shoulders, on top of its originally equal share in the deficit in employment, due to the diversion of effort from production to walls, *this additional burden of deficit in employment which properly belonged, at least in due proportion, to the wall-workers.* This creates amidst the producer-class a total deficit in employment, below its natural productivity, of considerably more than the original twenty per cent. This intensifies the sense of disparity and injustice, and enlarges the chance of occasional total idleness.

Exertion no Sign of Economic Worth.—All this is equally true whether the moneys diverted from producers to wall-workers be paid for active hoisting, or as an honorarium for caste-idleness. The wall-man may be either an able, energetic fellow, building walls and hoisting things over them most conscientiously and efficiently, or he may be an idle nincompoop —it makes no difference. If society diverts into his pockets (as an average for his class) an income equivalent to the produce of, say, ten average producers, which he wastes either in active, conscientious wall-work, or in idling upon the walls, or in absenteeism, then *this act has inevitably produced the same deficit in the purchasing-power of the dollar, in the aggregate hiring-power of the Ultimate Consumers, and thus in the aggregate volume of employment, as if the ten producers, plus the wall-man himself, had all been idle.*

Thus the evil visible in unemployment arises originally in the *wastefulness* of the wall-work—and idleness is no more wasteful than is misdirected effort. But its fruits far outspan its roots. It is merely the *subconscious* deficit in ideally full employment which equals the wasted time and effort. The bitterness of *conscious* unemployment spreads far beyond, and is due solely to the *disparity in distribution of this deficit* by the artificial and insane pre-eminence attached to wall-work.

Disparity between Individuals.—Then the debate, so far, has compared only *classes,* as if the income and employment available for each class were distributed equally among its individual members. But now must be considered the effect of natural differences between individuals.

This becomes important because of the existence, in actual society of the *competitive wage-system,* operative in the face of a *deficit below the natural aggregate volume of employment.* It is the combination of these two factors, and not the first alone, which explains virtually all visible unemployment, all social discontent and much individual moral lesion—peculation, graft, gambling and prostitution.

An Aside to the Socialists.—Socialistic philosophies place upon the former factor alone the whole blame for these evils, which are really due to the combination, and therefore asks the abolition of the competitive-wage-system. But more careful thought will show that the evil result is due entirely to the unnecessary presence of the second element. That once abolished, by the elimination of all unproductive effort—and that, in turn, accomplished by the prohibition of all ownership-in-

industry—and the competitive-wage-system can bring no harm to anyone. It will endure permanently, long after evolution or revolution has swept the commercial system into past history.

The Explanation of Over-Work.—To return to our illustrative community, because of the uneven distribution of this artificial deficit in the aggregate demand for labor, making apparent the menace of unemployment and offering a delusive promise of escape through unusual industry, *all will overexert, in order to avoid the fate of enforced total idleness.* Labor, however organized into trades-unions for defense, must compete with itself in the atmosphere of a panic. Its ethics must inevitably degrade into the brutality and frantic over-exertion of a mob fleeing from a burning building.

Organization may allay the panic in spots, but it cannot put out the fire and abolish all casualties. Some few are sure to be caught. For everywhere the menace of unemployment threatens one.

Nor can the simile be true to life until it is understood that there is no other way for the organized minority to save its few, except by trampling down those outside its selfish ranks; for such is the case in economics. Trades-unionism unquestionably pays, for those inside, *but only at the expense of those outside, who pay all the higher wages, and lose all the jobs, won by trades-unionism.*

Hence, if all came in, trades-unionism would become futile. There would be none outside for it to exploit—except the capitalist-employer class, and *that class has always fattened upon trades-unionism and high wages.* Its wealth has grown immeasurably since unionism came into fashion. Its riches are plainly not available as a source of betterment for the wage-earners. Unionism exploits only wage-earners.

Even if all workers should become union-members, *that cannot affect the source nor the fact of the deficit in employment.* It would still be there, only then all of the laboring class must suffer from it alike. The comforting delusion of trades-unionism would then be gone forever, leaving man face to face with the grim fact that famine, poverty and unemployment are created by, and not removed nor remedied by, commercialism and trades-unionism together—the latter being merely one department of the former.

Concentration of the Deficit in Employment.—Thus, in our imaginary wall-building factory-community, such an underlying, ever-present deficit in employment must soon result in the concentration of the entire burden of the visible, conscious unemployment, which really originated with the wall-people, first *upon the producers as a class*—although that is the one class which is innocent—and finally *upon a few individuals thereof.* While, as in the case of the fire, all will suffer from the panic, yet only a few will be visibly burned.

Whereas in its origin the deficit was equally distributed, and therefore subconscious, in its distribution it has become unequal, concentrated upon a minority, exaggerated into obvious disparity, and therefore a conscious social sore. In the laboring ranks of actual life, whereas all are partially idle, only occasionally and individually does the deficit assume the form of total idleness, for more or less of the time.

In his constant fear of this total unemployment each worker will be willing to exert to the limit of his endurance, in order to persuade his employer that he is worth keeping upon the pay-roll. And the employer, holding in his whip-hand the consciousness of this implacable menace of unemployment, remains always in the saddle, strike or no strike, union or no union, wages rising or wages falling, and becomes, as a class, steadily and uncontrollably richer and richer.

No suggestion for limitation of hours, nor for betterment of conditions, may come from any individual workman, with other result than the loss of his job. Labor continually finds itself confronted with the choice between overwork to the limit of physical endurance, or else no work at all.

Society may debate as it pleases the question whether any given schedule of work is onerous or not. Outside the selfishly protected trades-union, *it cannot but be onerous;* and often within them it is so. For if, in any case, this were not so, to the limit of endurance, then the universal deficit in employment would promptly force those to apply who could endure more. Thus the schedule of effort, under pressure from the deficit in employment, recontacts continually with the limit of endurance. Equilibrium is found only by the compression of life to its biological maximum of density, monotony and malnutrition—traffic charged all it will bear.

Every instinct of self-preservation and love of family but aggravates the evil. Inevitably factories become congested, the work-day extended and the task specialized—all far beyond the dictates of humanity or wisdom. Thus arises the congestion and dull monotony of factory and slum life—everywhere the paradoxical combination of overwork for some with none at all for others—of labor always striving, individually or through unionism, to pull the planks of employment from beneath its brothers' feet.

Arterial and Venal Economic Circulation.—Thus the wall-building system of social distribution amounts, in effect, to this following dual method of circulation. In the one direction *wealth,* originating with the producers alone, is being transferred bodily, arbitrarily and artificially (through this social delusion as to the walls) to the wall-people as a class, there to be concentrated unequally upon a few of its individuals. In the other direction comes back, as the inevitable counterbalance, a corresponding and equal *deficit in employment.* Originating with the wall-workers, it is transferred bodily and artificially (through this same social delusion) to the producers as a class, there to become a source of panic, overwork and poverty for all, and of concentrated idleness and destitution for a few. Unemployment is to wall-work what reaction is to action.

Just as, among the wall-people, all are conscious of some superiority in employment, income and independence, while some are very much so, so also, among the producers, all become conscious of some deficit below a full demand for their best possible services, or for all their time, while some experience a total lack of demand for any of their services at all. It is as natural and inevitable as a pig under a plum-tree that superciliousness should become the ethical characteristic of one class, and bitter discontent that of the other.

The Basic Law of Employment and Unemployment.—Thus ends the usefulness of the parable of the wall-builders. By their every attribute they have now been identified with the commercialists of our actual, modern economic world. The foolish public of our imaginary state, which upheld the insane policy of wall-building, and thus made possible its continuance, has now been identified in every respect with the actual public of to-day, in so far as it upholds and continues in power that self-enthroned oligarchy of commercialism which is undermining its prosperity and stability.

Therefore from now on, in this book, the silly, solemn, tragic superstition which holds that employment comes from the nominal employers may be frankly understood to be nonsense, at its best, and treason to civilization at its worst. Employment can come only from the Ultimate Consumers—from Ultimate Consumers who have previously produced. The commercial employers are merely the non-creative agents of these Ultimate Consumers—sometimes functioning also as producers, but in their commercial capacities being destroyers, rather than creators, of employment.

From now on the following basic law determining the relative volumes of average employment and forced unemployment, inevitably current in any community, will be understood to be obvious and axiomatic, namely, that:

The aggregate volume of employment available bears the same relation to the natural productive power of the community that the current aggregate of actually productive effort does to this same natural productive power; or, conversely, that there is always and inevitably a deficit in employment, below the natural productive power biologically present, equivalent to that portion of the community's total natural energy which is currently being dissipated in commercialism.

Thus enforced unemployment, on whatever lines it may be distributed between one person and another, is in aggregate not only an indubitable fact, always present, although varying widely from time to time, but *it is an inevitable fact*—so long as we adhere to our present economic delusion of relying only upon selfish ownership-in-industry, as our means for the maintenance of plant and for the interchange of commodities or service, and upon pecuniary profit as the sole motive sentiment in industry. We might as well try to suspend the law of gravitation, or dodge the conservation of cosmic energy—of which latter principle this law governing unemployment is but a special phase—as to escape the penalties of this basic economic law.

Cherished Delusions.—Yet it is a difficult task to persuade public opinion to accept this scientific view, under all the provocations of contact with the problems of daily life. It is a most unwelcome task, for instance, to inform the many good and sincere people who are investing time, money and energy most philanthropically in securing jobs for the unemployed, that *they are making not the slightest dent upon the problem of unemployment*—except, perhaps, to prove the futility of their own efforts.

For when they feel such natural satisfaction over having placed, say, five hundred seekers after work during the previous year, it is not pleasant, however necessary it may be, to discourage them to the extent of pointing out the truth, namely, that *they have not thereby increased the demand for labor by a single job, nor even by a lone dollar!* Their five hundred placed applicants have merely *displaced into continued idleness exactly five hundred other applicants* who, except for said philanthropic efforts, would otherwise have found places.

For there is not the slightest evidence that even one of these five hundred places would have remained unfilled, had the employment-bureau not sent in its applicant. The employer would surely have hired someone, in every case, had there been no employment-bureau.

For there is no fixed number of unemployed, so that efforts at finding places for them may hope ultimately to reduce this number. The dead sea of enforced idleness is fed perennially from never-ceasing fountains. Those "fired" from jobs gush forth daily from factory and office in every corner of the land. Like the number of business-concerns in the land, *which endless and active consolidation fails ever to reduce,* there is a continuous, current creation of newly unemployed, which no amount of re-employment suffices to soak up.

Although the rate of disemployment varies from day to day, or year to year, with every fluctuation of security-prices in Wall Street, yet given the data for any one date, the number of workers additionally forced out of a job that day could be stated with accuracy and confidence. For our volunteer workers in employment-bureaus to steer some fraction of this endless, daily tide of jobless toward reinstatement, rather than to let re-employment select its personnel haphazard, may be a kindly —but it is certainly not a helpful—thing to do.

On the other hand, if all these kind-hearted and energetic people would only drop their futile methods and apply the same united, earnest effort to an attack upon commercialism as a whole—abandoning the obvious but futile for the strait and narrow way of real effectiveness—just as labor was urged above to drop its fight for the obvious, but futile, higher wage—then there would result a real, if not an immediate, remedy for unemployment. Then, ultimately, *all* unemployment would disappear automatically and permanently. The recipe for doing this is given in outline in Chapter XXIV.

The Competitive Wage System.—The first light thrown by this illuminating fact of a relentless, uncontrollable deficit in employment, due to commercialism, must be devoted to clarifying the real nature of the competitive-wage system. For the idea is now fixed in the minds of all wage-earners who have in any way adopted the socialistic philosophy, that *the exploitation of the poor is accomplished by means of the low wage, and that it is the competitive-wage system which lowers wages.* Hence (they believe) emancipation lies in the direction of a higher wage, and that higher wage is to be abolished by the abolition of the competitive-wage system.

This topic will be treated more adequately in Chapter XXIV, but the first thing to be kept in mind about it is the influence of this ever present deficit in employment. For when that is once eliminated, and the pressure of a panicky fear of being unemployed is removed from labor, it will be realized that *it is not wage-competition which lowers wages, any more than price-competition lowers prices; nor is it the low wage which creates the hardship. It is commercial competition, even that among workingmen, which elevates both wages and prices—but prices faster than wages—and so produces unemployment. It is high wages, high prices and the uncertainty of employment which create the hardship—and worse, the fear of hardship.*

Combat of any sort over ownership, wages or prices, whether between businessmen, or between workmen, or between businessmen and workmen, or between businessmen and Consumers, always raises prices first, then wages (more slowly), reduces consumption, and thus finally creates a deficit in employment. When commercialism shall finally have been abolished, the wage will then be much lower than now; but it will then buy far more than the higher wage of to-day, and there will then be no more unemployment.

Yet the competitive-wage system, then adjusting equitably the wage between one wage-earning Ultimate Consumer and another, with no employer in existence except a third wage-earning Ultimate Consumer acting as agent for the two—adjusting the wage between laborer and skilled producer, between imbecile and intellectual alike, *according to what each produces, as estimated by the Ultimate Consumer*—then will be still in full swing. When capitalism and competition shall have been completely abolished—and with them, unemployment—the competitive-wage system will have survived the change as a harmless thing, hated by nobody.

Our Unfortunate Lack of a Science of Sociology.—It is a national misfortune that these simple relationships, so directly the reverse of those naturally inferred by the ignorant from superficial appearances, should not have been taught systematically and industriously by every professional teacher of political economy, whether in college or press, during the last quarter-century, at least. It is worse. It is this neglect which will prove most directly responsible for our inability to dodge the coming world-cataclysm—because there is nowhere any organized body of intelligent public opinion which understands the forces at work, anticipates what is coming, and prepares for it in time.

The Impotence of the Oppressed.—It is this broad fact of a growing deficit in employment, due to a growing volume and intensity of commercial militarism—coupled with the fact patent from all history, namely, that *it is always impossible for the oppressed, as the class most lacking power, to accomplish their own liberation*—which has defeated the efforts of labor at its own emancipation through the shortening of the working-day. For throughout the last century the average length of working-day has steadily decreased; yet labor is more discontented than ever, because its purchasing-power has relatively decreased and its employment become less certain.

A century ago the standard workingday ran "from dawn until dark"—often fourteen hours. A generation ago the ten-hour day was general. Now we have virtually the eight-hour day. Within a week of the writing of this page labor has formulated its demand for a six-hour day. Yet all this progress—which, according to superficial reasoning, should have doubled the demand for labor, or halved the deficit in employment—*has left the problem of unemployment in a condition more threatening than ever before.*

Thus the winter of 1913-14, just before the opening of the

Great War, was acute in this respect beyond precedent. The later advent of the war, by offering ample excuse for every ill of society, first hid, and then, by its artificially stimulated demands for munitions, largely canceled this symptom; but it is only "for the duration of the war." As soon as peace has been assured—or as soon thereafter as commercialism can swing through one of its fairly periodic cycles—*unemployment will become the one coercive issue threatening the very balance of civilization.* For this task no issue is better fitted than is unemployment.

It is this same stress due to the deficit in employment which forms the curse of the sweatshop system, where unions are impotent to protect. It is this same which explains the large futility of child-labor laws, the enforcement of which is so often defeated by the parents, even against the sincere efforts of the employers. It is the same which makes logical those apparently unnatural degenerations of human life into quackery and fakirdom, into professional gambling and horse-racing (as contrasted with natural sport), into burglary or counterfeiting requiring greater mechanical skill than honest mechanical crafts, and into prostitution refined or unrefined.

We are accustomed to asking ourselves: Why don't these people turn their faculties to honest work? We fail to see that these are occupations to which their devotees turn, not from immoral preference, but from economic despair over attempts to support themselves adequately otherwise. For commercialism not merely cuts off the normal demand for wholesome, productive effort. *It offers through the medium of unearned incomes lightly spent, practically unlimited employment, with fancy reward, to those who will abandon, to greater or less degree, whether in legal or illegal business, their moral scruples.*

The psychological "natural depravity" or atavism so commonly debated, by those who see all the problems and solutions of life as compassed within the individual, is usually about the same dominant element in these lapses that a sense of humor is in a professional clown. Indeed, most of the silly clownishness now so common on the stage, and in the "comic sups.," arises in this same way. In all of these fields, and in many more, the artificial deficit in employment created by commercialism, and the artificial inducements developed by the unnaturalness of its rewards, develops all manner of popular tendencies, which lacking explanation, seem unnatural, paradoxical, degraded and inhuman.

Quantitative Unemployment.—In order to understand even the facts, not to mention the cause, of unemployment, one must understand that one part of the total deficit finds expression as *quantitative* unemployment, and another as *qualitative* unemployment. The former refers to quantity of *total* time spent in idleness. The latter refers to a deficit in quality of work demanded, below the maximum of which the individual is actually or potentially capable.

Only a minor fraction of the total volume of unemployment appears in the form of permanent idleness, or even of total idleness for any appreciable fraction of the time. Nearly all people are more or less continually drifting into and out of employment. Indeed, in the educated classes this is not always an unprofitable phenomenon. The variety of tasks open to an educated person makes it wise to assure oneself, fairly frequently, as to whether a maximum of suitability has been attained or not.

But in the lower grades of skilled and unskilled labor this inevitable drift of employment must stand as an unmodified loss of time. Whatever may be the minor irritant which causes one move or another, the net gain to the workman is usually zero, while his loss of time stands as an unbalanced loss. Statisticians of wages have now well learned that data as to mere *rates* of wages mean nothing, without knowledge as to the *proportion of the time employed.*

This intermittent, quantitative brand of unemployment, as also the next to be considered, stand among the items of dissipation of economic energy by commercialism which our tabular analysis of statistics quite failed to include. This is one of the many reasons for regarding the conclusions reached above as conservative, however some items classified as commercial may at the time have seemed strained.

Qualitative Unemployment.—Then it is not always in *quantity* of work that the deficit in employment appears. There is also everywhere observable a deficit in the *quality* of the employment to be had. Each person is obliged, on the average, to accept not only intermittent employment, and employment at wages less (in purchasing-power) than the value actually produced, but also *employment which the worker always feels is below the grade of which he is naturally capable.*

In many cases, such as the ticket-choppers of our transit-systems, or the sandwich-men or curbstone-fakirs on every sidewalk, for instance, this *incompetence of the job* is obvious and undebatable. But in most cases this deficit in quality of job below the worker's natural capabilities, although actually universal, is not so obvious as it is in the childish folly of selling and chopping up tickets by the million per diem.

What is meant here is that an employer hiring a man who might, at his best, let us say, make watch-springs, *gets his best profit out of this man by using him to make stove-bolts instead.* This is because the workman can squeeze out a much larger quantity of stove-bolts per day than he could of watch-springs, or of any other article in which he was sufficiently interested to do his best.

Under commercialism, the prime desire of the employer is *quantity per diem.* It is on that, and not on quality per man, that he makes his biggest profits. So long as we continue to regard profits as the best form of remuneration, it will continue to be *low cost to the employer, and not high value to the community,* which guides all factory-production, under commercialism. And so human life responds by getting out a larger and larger quantity of work, as the quality that work falls in the scale of skill, intelligence and taste.

Here again is seen a manifestation of the operation of the law of economic equilibrium, "charging all the traffic will bear." The employer who is paid in the form of profits actually gets his maximum income when he has deliberately restrained the workman from exerting his best ability, by some major fraction of the latter's maximum potentialities.

In *natural value to the community* the man's output of watch-springs would be far higher than of stove-bolts, because of his greater interest in his work. But in *commercial valuation,* viewing the output as a thing upon which a profit must be made in the competitive world, the watch-springs are worth far less—to the employer—than the stove-bolts.

Automatic Involuntariness Again.—In other words, picture to mind the Consumer as standing on one side, with his twenty-cent dollar in his hand, selecting not what he wants, but what (under that limitation) he can buy. Picture the producer as standing on the other side, with the fear of idleness in his heart. Picture standing between them the employer—caring not a prune whether it be stove-bolts or watch-springs, but with a keen eye upon his ledger and upon his competitors—and it is plain that no one of the three is going to act naturally or humanly.

The employer will determine the job as mechanically as any of the machines in his factory, grading the work solely to secure the maximum profit. The Consumer, pinching his twenty-cent dollar, will accept as poor a grade of work as his soul can endure, while still continuing to buy and live. The producer, fearing eviction, will accept a grade of work far below his natural preference, and will turn out tons of stove-bolts instead of ounces of watch-springs. *Production and Consumption will both have been sagged to a minimum in quality, as elsewhere it has been in quantity, by the institution of "charging all the traffic will bear"*—by placing production under the control of a man who has been hired (by profits) to have no real interest in production.

Similarly, when an employer wishes to sell watch-springs, he hires to make them a man who might, at his best, make telescopes. And so all along the line. Sometimes the higher ability is already in the man, but latent and unreleased. Sometimes it is not there, but could easily be put there by education and opportunity—if only there were some rational system for selling it, as Value-to-the-Consumer, after it had been put in.

The commercial employer has no motive urging him to give his men the best work of which they are capable, *for he pays only stove-bolt wages to the watch-spring man for stove-bolt work, and watch-spring wages to the telescope-man for watch-spring work.* He has no call whatever to do otherwise. His sole aim in life has been deliberately determined by society to be *profits,* not output; and his profits would not be increased, but diminished to the point of bankruptcy, if he gave to each man the best work, in value to society, of which he was capable. For then there would be left no margin with which to pay profits and costs of competition, the stuff could not be sold, and so both employer and workman must quit altogether—until the Ultimate Consumers shall have organized themselves for their prime business in life: directing production.

It is in this sense that the bulk of all workers who appear in the statistics as employed are in reality only partially so. Yet it is just this sort of unemployment which should be our real concern; for it is this which, in its enormous aggregate, is most active in producing that general poverty and discontent which is now rife throughout all christendom. It is because the statistics concerning unemployment can take no cognizance whatever of this most important factor that they have been assigned to last place in our consideration of the subject.

This deficit in quality of job is universal throughout all industry. It is one of the most penetrative of all explanations of our social flaws. It operates at all levels of economic ability, although with differing degree of intensity. It explains why our factories are filled with machines performing the simplest tasks by the thousands per hour, in the dreariest monotony, attended by operatives whose faculties are not in demand to any appreciable degree. Yet such concentration of monotony quite fails to bring its victim that natural return, either in money or in hours, for which any person might be expected to undertake such a program.

Upon such operatives the sole demand is for endurance of monotony. Hence, since economic pressure always crowds life to the utmost at which life is possible at all, their one need is diversion, *diversion*—diversion secured at any necessary sacrifice of moral or esthetic standards—diversion of a nervous system sometimes too exhausted to respond further even to the dictates of hunger. Really, to those whose life has happened to combine a factory-experience with the reading of Nicholas Nickleby, the picture of Dotheboys Halls is not one whit exaggerated. Drudgery coupled with starvation! Why, our slums are peopled with Smikes. The only difference is that Dotheboys Hall typified, nominally, a school, while our factories and slums are our real, and not our nominal, schools for the citizens of the next generation.

Many and diverse are the sorts of partially employed. It is not merely the typical factory-hand who performs intensely monotonous tasks requiring little skill. The commercial deficit in proper employment is visible in the millions of stenographers writing endless repetitions of: "In reply to yours of the tenth" or "We know that you will be interested," when the chances are a hundred to one that you are not. For these typists—if they must be at some machine at all—should be aiding the

Federal Commissioner of Imports to inform the Iowa Commission of Retail Trade concerning the latest cargo to arrive from Europe, or some author to get out a helpful book. It explains the drudgery of commercialism itself, which condemns to salesmanship those who long to get into overalls and do something useful, or who might be scientists or artists.

The vast majority of all small retail-shop dealers, the counter-clerks in the large stores, the middlemen and pedlars duplicating each other's stocks and efforts—actively offering goods at times or places where ninety-nine out of a hundred accosted do not want them, or else dawdling idly behind unneeded show-cases through over-long days, awaiting some sporadic customer whom the ten duplicate shops had missed capturing; the printers and multigraphers who get out silly circular-letters or other advertising-matter, frantically urging people to become excited over the wonderful color of paint on the seller's new brand of coffee-mill; the many bookkeepers posting numberless unneeded accounts; the vapid chorus-girls, and their even more offensive fellows, performing the silliest of acts, like trained monkeys, to win the applause or the ticket-money of those whose nerves are too far racked by negotiation to enjoy anything more dignified, or whose naturally low tastes have been accorded by commercialism a command over theater-seats out of all proportion to their natural place in society; the curbstone-fakirs, acting the part of children, and the sandwich-men, as pathetic as dumb beasts; the fortune-tellers, gamblers, petty swindlers, ingenious counterfeiters and daring burglars, all doing these things because society pays them for it, but will not pay them for productive effort; the newsboys and itinerant bootblacks, matching pennies and "shooting craps," who ought to be at school or at wholesome play—because even in bootblacking there is a deficit in quantity, as well as in quality, of employment.

All these and a thousand others are instances of people who are doing useless things, or things less useful than might be, merely because, *in the face of a deficit in the aggregate demand for labor, they do not know what else to do. All these are partially or wholly unemployed,* usually in both quantity and quality of work together. Yet most of them appear not at all in the statistics of unemployment.

Then there are the myriad of petty shop-keepers who ever and anon, here and there, start abortive little enterprises in merchandising, only to sell out at a big loss a few weeks or months later. These are already included in our statistics as commercialists, species merchant; but in reality they should be classed rather as victims of commercialism than as active agents. In either case they should be classed as unemployed, for they are neither aiding the community nor supporting themselves. Yet they escape all our statistics of unemployment.

This whole phase of sub-quality of employment—usually coupled with overwork, as to hours—as a general feature which permeates all grades of effort, may be referred to hereinafter as the "ticket-chopper" sort of unemployment; for, to the city-dweller, there is no more obvious instance of it than the ticket-choppers of our transit-sytems—one or more able-bodied men at each station, slicing away for ten or twelve hours daily, merely to destroy tickets which an equally wretched caged-canary spends an equal period daily in selling at a nickel apiece!

Then no mention at all has been made of the unemployed inmates in our jails, asylums, hospitals, etc., many of whom are there as a result of the deficit of wholesome employment at adequate wages outside, nor those who are "employed" in caring for them. Nor has any attempt been made to include, for instance, the police, idling away their days upon beat or in reserve, the product chiefly of that undercurrent of petty lawlessness which is iself the inevitable fruit of unemployment, amongst the slums which unemployment has created.

For it has been a basic principle of this analysis to avoid everywhere the inclusion of features so extreme, or so near the line, as to warrant suspicion of muckraking. What is wanted is a sober, responsible determination of the real nature of commercialism, with its paradoxical combination of over-pressure towards over-long hours of work linked with an ebb and flow of undercurrent of unemployment. Our conclusions from this method of investigation are that, *at its very best, commercialism deserves instant abolition.* How to attain it is quite another question; but the first step is to decide upon the goal.

Thus the deficit in aggregate hiring-power in any land, due to the presence of commercialism, finds always a dual expression, namely:

(1) In a deficit in relative *quality* of employment for vir-

tually all—at least, outside the charmed circle of commercialism, and possibly even there—coupled with an over-pressure for endurance of long hours and monotony of task; and

(2) In a deficit in absolute *quantity* of employment for a shifting minority, whereby they enjoy no work at all during a part of the time.

Character and Unemployment.—The identity of this minority which falls fated to unemployment is determined, of course, by its *relative* lack of ability. These unemployed are, on the average, the less able—in seeking work, if not in performing it. While they include those who lack commercial spirit, in being too scientific or too artistic to be able to secure a livelihood at all commensurate with their tastes, or with their natural usefulness to society, yet it includes also those who are idle because relatively incompetent. With a majority of the unemployed who are industriously inclined, at least to the extent of seeking work, it includes a minority who are sheerly lazy.

It is this minor and resultant fact which is responsible for the widespread, yet quite false, belief that unemployment is due to *absolute,* rather than to relative, incompetence—that these people are not employed because they are incapable of anything more useful to society than idleness.

Why, there is no such person! There can be no such person! *There is no person alive, whether competent or incompetent, who is not more useful to society employed than unemployed!* There are plainly many out of whom no commercial profit can be made, but there are none who are not useful, in the factory-sense, to some Ultimate Consumer. Even with the insane—sufficiently irresponsible to have to be confined—we are now learning, in a very late and lame way, that the first thing to be done for them is to put them to work.

Laziness or incompetence determines *who* shall be idle; but it has no slightest influence over *how many* shall be unemployed.

If there must be a deficit in employment—which is wholly unnatural—it will, of course, be the less competent who will fall into it. But it is a very foolish society indeed which can find no better use for those who are merely less able than the average for their class, than to condemn them to a wandering idleness. As an aid to their becoming more competent, the debtors' prisons of a century ago—so helpful in lifting men out of debt

—were a dream of heavenly wisdom in comparison with our present folly of forced unemployment.

The Employer's Deficit in Purchasing-Power.—It is fully recognized here (as possibly denying this proposition that labor is always underemployed as to quality of work) that *employers are always complaining most sincerely of their inability to find competent labor.* This general deficit in quality of labor offered, as viewed from the employer's standpoint, is just as universal, unquestionable and significant a phenomenon as is the universal surplus in supply of labor, as to quantity, over commercial demand. Indeed, the two are but symptoms and parts of one whole.

These employers may continue to grumble. Under that increasing commercialism for which they themselves are as responsible as any, the situation is sure to grow steadily worse in this respect. When they attempt to hire labor, as now, with a dollar four-fifths diluted, as to purchasing-power, by this same commercialism, *they are doomed to a disappointment as inevitable as that awaiting every other purchaser of any other commodity whatever.*

The provision-dealer can no more supply food of the quality and price which the Consumer deems right, nor the railroads give transportation on the fares urged by the public commissions, while our community-coin continues to be a twenty-cent dollar, than the laboring world can breed and educate labor on the diluted purchasing-power now offered by commercialism as a wage. *A universal and increasing deficit in quality and quantity of supply, and of contentment with the result, is the whirlwind which we everywhere must reap, on both sides of the capital-labor fence, from our superstitious faith in the heavenly sacredness of selfishness, when organized into a national system of ownership-in-industry, and our lack of faith in the good old wage-paid factory-system, as supplying all the motives necessary for industry and expansive enterprise.*

Before any other question may come before the court of fate, labor must be paid with a hundred-cent dollar. Labor must be fed, employed, educated, amused, given hope and granted a sense of justice—all through receipt merely of the value of what it produces—before it may be expected to embody ability, contentedness or patriotism. The employers will never find labor matching what they regard as its opportunity until they have made the opportunity precede the labor. This can be accomplished only by the abolition of all ownership-in-industry.

For instance, the author, as a teacher of engineering for a dozen years, has had many interviews with alumni who returned to the Institute as successful employers. Each of these had a friendly criticism to offer as to the Institute's courses of study. According to each of them, the school was not turning out the right sort of graduates.

Yet in every case it developed, upon inquiry, that what each employer regarded as this "proper" sort of graduate was the *one best fitted for helping this particular employer make money.* Such a graduate might be very poorly fitted for helping the average other employer make money, and not at all fitted for usefulness as a citizen to society as a whole, because two narrowly trained and specialized. This made no difference to these critics. Each of them looked at life through spectacles which must have had their rims cut from silver dollars.

Then the commercial employer must remember that even that overwork and worry on his own part of which he so often complains—which alternates with the unwelcome unemployment of his factory said to be due to "over-production" (which it is not) —is enforced by that same commercialism which causes the deficiency in quality of labor offered. Yet he never thinks of taking this cause to task for its many sins. I have heard one manufacturer after another complain of the intolerable costs of advertising, of ruination by price-cutters and other commercial privateers, and of interminable pressure from both sides—trades-unions and strikes on one side; competitors and legislatures on the other—squeezing all the profit and pleasure out of life. Yet not one of them will admit for an instant the wisdom of calling all this by its right name—organized anarchy—and of escaping it all by conducting all industry *as he conducts his own factory:* by excluding all ownership-in-industry and all license to compete. Each of them will repudiate the suggestion that he himself should be made the salaried, non-owning, sole national commissioner of his own line of production, freed forever from the harassments of commercial competition.

The Universal Economic Paradox.—Thus every contract between employer and workman, and every lockout and strike, must be approached by the student of economics in recognition of a sincere belief on the part of the employer that *he is getting help which is far below what he ought to have in quality, and that he is paying for it more than he ought;* and also of an equally sincere belief on the part of the workman that *he is performing tasks below the best grade of which he is capable, and that he is being paid for their performance less than they are worth.*

But these familiarly opposite and inconsistent attitudes may not be explained away on the ground of frail human bias and contrariness, whereby each side maliciously looks at the same thing in an oppositely erroneous way. That is to miss the whole point of the case. The significant and instructive fact is that *both sides are right simultaneously. Each of these apparently inconsistent beliefs is simultaneously true.*

For the workman is right in feeling that his wages are too low, because he is being paid in dollars worth only twenty cents each. The employer is right in feeling that the work is below standard, because he is using help which has been bred, fed and educated upon a milk-and-water income of that sort.

The workman is right in feeling that the task is below his natural best, because he is executing twenty-cent shop-orders for some Ultimate Consumer who paid full dollars across the shop-counter. The employer is right in feeling that wages are too high, because he has to pay enough dollars so that, even if they are worth only twenty cents each, they may still come somewhere near to supporting the workman.

This book elsewhere takes the position, in regard to the struggle between capitalism and labor over the rates of wage, that this is interminable—at least, by any conceivable decisive and final victory of either side over the other. The foregoing paragraphs furnish one of several foundations for this position. Viewing merely the cause of conflict visible in this deficit in employment on one side, and of quality of labor on the other, it is plain that capitalism and labor are at loggerheads over a matter in which, accepting commercialism as inevitable, *both are right and neither is wrong.* The utmost victory on either side, in such a case, would do nothing to remove this deficit, the source of all the friction, and so step not an inch forward toward a permanent solution.

Life, Labor and Hope, all Charged all they can Bear.—Thus this deficit in demand for all and the best of life, due to our partial dissipation of our economic energy in commercial combat, finds its expression not alone where it is created, but in every walk of life. This sort of economic pressure, like every other, is transmitted throughout the body economic in perfect fluidity.

There are all manners of variations in the form and degree of discontent resultant from it, but there are none in kind. In each grade or layer of life there prevails the feverish struggle to avoid being caught by the deficit in employment, the heroic effort to make a twenty-cent dollar bring up a family of children to a grade of life as high, or higher, than that in which the parents earned the dollar, and an equally discouraging attempt to get something productive done with the aid of labor paid with twenty-cent dollars.

In each layer or class exists only a minority which finds life really easy—the few who inherit that fortunate combination of natural faculties in excess of ambition or temptation, with an independent income, or else an inborn faculty for commercial success, which makes of life a smooth and joyous pathway from childhood to the grave. But in each stratum also, in contrast with these, the vast majority finds life more or less "just endurable," because at every point it has been sagged by its burden of commercialism "all it will bear"—with this fact always indicated by the current failure of a minority to bear it.

Each person's instinctive sense of his own natural abilities and destiny in life finds a deficit in life-support and opportunity—whether dietetic, artistic, scientific or social—and a deficit in both certainty and quality of employment. So long as we are content to remain ruled by commercialism, this subconscious sense, however exaggerated at times by vanity or a too vivid imagination, must rest always upon a basis of fact.

The "Starvation-Wage."—In each class or layer of life, below its minor complement of foam which floats in the sunshine above, there exists always the major substratum of its members, the solid strength of society, which is enjoying what can only be called, properly, its "starvation-wage." This is not necessarily any literal starvation of stomach, nor even an obvious emaciation of any of the parts of life; but nevertheless the lowest depression of nutriment of body, mind and spirit which is consistent with continuity of life from generation to generation—the minimum income of commodities, of leisure, of pleasure from work or play, of hope based upon progress—upon which the class can maintain that joy in life which will permit it to reproduce itself permanently, in the face of all accidents, without slow decadence.

The "Submerged Tenth."—Below this major substratum of each class, again, lies another and a smaller one. This must be called the "submerged tenth"—the unfortunate laggards of life *who would like to acquire the starvation-wage if they could, but who fail even in that.* They by no means all live in the slums.

Intermittently these find employment in the class to which by taste and ambition they belong. But the idle spells increase in number and length, through the natural result of idle spells. Gradually the struggle weakens. Slowly or suddenly the victim loosens his grip upon life.

Sometimes gradually and imperceptibly, sometimes violently and dramatically, he (or she) slips out of sight from the class where so brave a struggle was made to maintain existence, to find peace in the obscurity of the class below—if there be a class below—or in the grave if there be none. For it is the fragments of life thus ground off from the lowest economic grade by the attrition of commercial impact and friction, and which can find no lower level into which to sink, which therefore fill our hospitals, asylums, courts and prisons for a time, on their way to final dissolution.

The Basis for True Optimism.—The author is too much of an optimist to leave unbalanced so depressing a picture as this. If this were all, humanity must be gravitating steadily downward as the decades pass.

But this is not all. The great and as yet imperfectly defined, but constantly active, forces of automatic, subconscious, natural *biologic growth* are everywhere contending with these artificial, corroding, eroding, social processes of commercial wear and tear which man, in his folly and mental inertia, has allowed to grow upon himself in the night.

Civilization as a whole is undoubtedly progressing; but it never advances smoothly, with all its parts moving in parallel and at the same rate. As no other phenomenon in the universe ever progresses in this way, why should we expect it of humanity?

Mankind has always advanced by increasing first its mere population, its crass quantum of life. It has then directed that surplus of new life into a sacrifice of itself in order to bring the conditions of life into consonance with the needs of still more life—either in the endless petty duties involved in raising progeny, or else in the overthrow of some great public wrong or other, inherited from the past and now rendered intolerable by its mere contact with the new quantum of life. It does this in order to make the world permanently habitable in the future for ever larger populations, each of which will create for itself, as it arrives, its own new life-task.

Procreation, in its modern sense, is not completed with the adolescence of the individual, *but only with the continual creation of a new social order fit to permit the life of the new individual—of an ever larger number of such individuals.*

Thus, as these pages are being written, American youth is spilling its best blood in overthrowing Prussian militarism. Its next opponent will be our own American commercial autocracy, soon to be disclosed in its true light as suddenly as Prussian military autocracy was disclosed in 1914, or as the true nature of negro-slavery was disclosed in April, 1861, to those who had mobbed the abolitionists only shortly before.

The Natural Strife of Life.—Thus do the forces of biologic growth create constantly an unending upward current of new and hopeful humanity, faster than commercialism can mar, sodden and destroy it. Life comes ever from below. This is why we see life as ever rising, yet the average result disappointingly stationary. The risen, cultured classes are never self-propagative. They must be recruited continually from below, by this ebbless tide of fresh, ambitious young life, fostered by devoted parents.

But this fact should not disguise the parallel fact that commercialism, nevertheless, is itself growing simultaneously and acceleratingly. The new life does not annul commercialism, as it rises. *It merely accumulates in parallel, as commercialism is itself accumulating simultaneously, toward the day of inevitable conflict between the two.*

In the meantime commercialism, like Prussian militarism—except that it is not so conscious of what it is doing—defiles what it cannot destroy. Downward through this always rising tide of biologic growth sink ever the victims of its artificial antagonisms—those starved by its gratuitous wastes, the current precipitate of solid particles of dead life-dust into which mankind has been degraded by its acid poison.

In this dual interaction between upward growth and downward precipitation of life, the rôle of commercialism is purely that of the deterrent and destructive. It is the counterpart, in social energetics, of what impact, friction, radiation, absorption and impedance are in material energetics. Both economically and morally, the effect of commercialism is wholly evil. *What progress we see about us occurs in spite of it, and not by its aid.*

The Basic Economic Contrast again.—In this unending balance between action and reaction, between force and friction, between life and commercialism—in the field of social energetics—we find economics and ethics jostling each other rudely. Contrast, for instance, the ethical standards surrounding an applicant for a job with those surrounding a prospective buyer. In each case the act, economically speaking, is the same, namely, the exchange of money for service wrought in commodity-form. But in the latter instance, because of the deficit in the community's purchasing-power, there are fewer buyers than goods offered. In the former instance, because of the community's deficit in hiring-power, there are fewer jobs than laborers offering themselves.

Therefore the seeker after work must call, usually, before seven in the morning. He must stand in line, often unsheltered, in rain or mud, and always unseated, until some petty authority of foreman or assistant superintendent finds time to interview him and to tell him, usually, that he is not wanted. Often he is driven away without even this touch of the human, by placards announcing that no help is wanted.

This experience he must repeat many times, wandering aimlessly and wearily, often for days, weeks or even months. There is no experience in life so surely degrading and demoralizing than thus to be taught, by manner as much as by word or fact, that *society regards your existence as not worth utilizing or maintaining, nor scarcely even tolerating.*

The Manufacture of Ethics.—Whether this converts one, through inhibition, into a disgusting beast, or through despair into a suicide, or through enterprise into a burglar or a vindictive enemy of all mankind, in a natural spirit of self-defense, is purely a matter of chance and temperament. Some such result is inevitable. Of the three, the enterprising one is certainly the least objectionable. Criminals are preferable to bestiality.

Thus criminals and anarchists we are manufacturing daily, more diligently and efficiently than any other line of goods. It is the young men who are denied properly paid jobs as machinists who fill our prisons and reformatories with their three-quarters quota of "youths under twenty-five." It is the girls denied natural return from dressmaking, or barred from marriage by the unemployment or poverty of the young men, who go astray.

Selling.—But view, in contrast with the fate of the applicant for work, the lot of the would-be purchaser of goods. Everywhere he receives courteous attention, if not sheer flattery and sycophancy. Whatever bodily comfort, or even palatial luxury, is feasible for the short time of stay, is always supplied. A minimum of delay or inconvenience is always combined with a maximum of cajolery. Deference is paid to every slightest whim. Except as the very nature of the market-system denies the possibility of informing the purchaser truly where what he wants is to be found, limitless care is taken, often regardless of expense, to aid him in making his selections—provided, of course, he selects from the seller's stock.

Apparently the Consumer is lord of the commercial universe. But if he believes all this bluff he is the worst duped mortal who ever mistook pretense for reality. *For every bit of this expensive flattery is charged up to, and collected from, the Consumer himself*—together with the cost of a lot more which he doesn't get. And every bit of all this expense goes, in effect, to prevent him from getting what he wishes.

The Function of Credit in Employment and Unemployment.—The instrument of commercialism through which is exerted primarily the pressure which produces unemployment on the one hand, and competition for patronage on the other, is *credit*. It is upon its credit-instruments, put into motion among the safe-deposit vaults of the financial district, that society now relies almost wholly for those transfers of supply and demand, in the world outside, which keep every appliance of industry in use. The momentary volume of business, production and employment is determined almost wholly by the momentary condition of the credit-system, and not at all by the skill and cajolery of the salesman, nor by the needs of the Consumer. While the Consumer steadily desires, and while the salesmen cajole unremittingly, the volume of available employment expands and contracts constantly, widely and sometimes violently, in sequence with the spasms of the credit-market.

Thus, for one recent instance, nearly two thousand workmen who were engaged upon a task in a remote mountain-district of a western State were told at eleven o'clock one forenoon that at noon they would be "laid off"—out of a job. They were hundreds of miles from home. Few possessed stocks of money or clothing. None had received any warning to secure any other occupation. The whole thing, in effect, was hideously cruel and unjust.

Yet the author has known personally the employers of these men for many years, and knows that they are neither cruel nor unjust by nature. Nor had the incident the slightest connection with any alteration in public demand for the work in hand. The sole explanation was that *overnight the national credit-system had collapsed,* to a point where no money was available either for pay-roll or supplies, had the work been continued.

The Credit-Barometer.—Yet it is not true to state that either employment or unemployment is strictly proportional to the momentary volume of credit. As with the barometer for indicating weather, it is the *rate of change* in the credit-barometer which indicates storm or calm in the employment-sky.

A sudden collapse of credit means acute unemployment. A rapid expansion of credit means *temporarily* a large demand for labor. But in the long run the expansion of credit results in unemployment—not because of the credit itself, which always aids employment, but because of the burden of interest-payments now artificially attached to our credit-instruments, which gradually cut down the purchasing-power of the people.

The result, under commercialism, of a period of good intangible credit is the automatic expansion of the volume of tangible, interest-bearing credit-instruments. Then employment is good. But when, finally, the overreach of this process, and the growing burden of interest and commercial costs, has brought about a reaction in intangible credit, *then the tangible credits* *prove not to be designed for reversing the method of their growth, to dwindle gradually in number or volume, by being retired, as they had grown. Instead, while remaining stationary in number and in face-value, they contract temporarily in valuation.*

But this means that our principal circulating-medium, amounting to over ninety-five per cent of our total, has suffered this collapse. Therefore all industry and business must contract their activities correspondingly, and many men are thrown out of work. Thus the momentary volume of unemployment varies widely, and apparently erratically, although the biological activities which lie at its origin keep steadily at work—or as nearly so as they can, in the face of the reactions coming from these erratic actions of the credit-system.

Statistics of Unemployment.—A study of these expansions and contractions of credit, in what are known as panics or crises alternating with prosperity, will be taken up in the next chapter. In the meantime the statistical history of unemployment, so far as we possess any, may be reviewed. But the postponement of statistics to the latter end of this investigation has been intentional; for the sort of unemployment which is of the most vital importance to the country—the floating deficit in quantity, and the universal deficit in quality, of employment—cannot be subjected to statistical measurement.

But the relegation of statistics to second place does not mean that they fail to support our main argument. Whatever light they may shed upon the problem shows unemployment to be rapidly upon the increase. They show it as increasing in parallel with commercialism, and in sensitive sequence with the credit-barometer.

The United States Census Bureau first secured data as to unemployment in 1880; but the results were not tabulated, partly because of the labor involved and partly because of "grave doubt as to their reliability." Virtually the only census-data available are those from the reports for 1890 and 1900, but for these years they are fairly complete.

The census for 1910, through one of those lapses in common sense in high places which are difficult to comprehend, entirely neglected the topic of unemployment—about the most vitally important field for statistical investigation which is open to the present generation of students of sociology. For it bears directly upon the degree of contentment, justice and even *stability* of our entire social organism.

When the mob which surged by the palace at Versailles looked to Louis XVI like a riot—but in reality was a revolution which later guillotined him—it was there primarily because its members were unemployed. The tidal wave of Bolshevism which has now inundated eastern Europe, which has all but undermined the foundations of the tottering German government, and which has already seeped into the cellars of our American institutions in menacing volume, is no insane freak, to be subjugated by disdain, anathema and force. It is a perfectly natural phenomenon, the inevitable result of unemployment, overwork and under-purchasing-power. It will get its answer to its relentless demands only when all these cruel follies have been abolished at once, by the complete abolition of commercialism.

Yet our latest national census disdains to consider any such an issue as that! Because ideal accuracy is unattainable in statistics as to unemployment, it prefers to leave us altogether in the dark—while the mobs gather—to grope our way blunderingly, without guidance from those responsible for that function, until the path has suddenly become illumined with the inextinguishable glare of explosion and conflagration, both literal and figurative![1]

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[1] The contract for the publication of this book is signed as the federal census for 1920 is being taken; therefore these warnings may not be fruitful until 1930—too late.

The ebb and flow of the tides of unemployment has happened to bring the taking of this census at a period of unusually low tide in unemployment. This is due to the recent manufacture by the allied governments of over two hundred billions of dollars worth of fiat money, printed on the press of patriotism. The bulk of this money has been expended in this country. This gratuitous injection into the situation of this huge sum of artificial purchasing-power has of course minimized, temporarily, the normal deficit in employment. Wages are high and employment active—but with prices rising ominously.

We have not yet begun in earnest to pay the interest upon this vast indebtedness, still less to pay the commercial costs involved in the whirlwind-expansion of commercialism instigated by this crass expansion of the world's volume of credit. Still less have we faced, yet, the problem of repaying the principal of this huge debt. But within a few years this reaction from our recent action is sure to come, and then we may expect such a tidal wave of unemployment to sweep over the entire civilized world as has never before been experienced.

The Census and Unemployment.—The census-returns for 1890 and 1900, when compared, show a marked increase in unemployment during the intervening decade. Nor can this be attributed merely to the prevalence of momentary prosperity during just the time when the census of 1890 was being enumerated, while times were relatively worse when that of 1900 was recorded; for the facts lie just the other way. The year 1900 was the second after the inauguration, in 1898, of the most pronounced period of commercial prosperity which we have enjoyed since the Civil War, and which grew in degree until 1903.

The figures as to this comparison between 1890 and 1900—for all trades together, for separate classes of trades, and for single selected trades—are given in Table 68. It will be noticed from this table that the fact of unemployment (although not its penalties) falls nearly equally upon the several classes of occupation, quite without regard to whether any given occupation be a source or a victim of the forces which create unemployment. Thus, the occupation of "agents, bankers, brokers, officials, etc.," shows a rate of increase in percentage of unemployed which is nearly as high as any other, except laborers, servants, seamstresses and female servants; but the suffering involved is of course far less.

Organized Labor and Unemployment.—Aside from the federal census there are numerous reports from various individual States, usually dealing with the percentages of unemployed in the registered trades-unions. To collect these into a single safe review of the country as a whole, if possible at all, would consume an entire treatise. Moreover, these unions represent just that class of labor which suffers least from unemployment, namely, that which is organized for fighting.

But it is upon the unorganized and unskillful—upon that great mass of humanity which, from the whole history of trade-unionism, can never be brought under class-organization—that the chief burden of unemployment falls, to such a degree of distress as to constitute it our real menace. For the degree of unemployed discontent which may burst forth upon us at any time is not limited to the highest crest of the past. Each fresh outburst rises to a greater height than the last. This is our real problem.

TABLE 68

Relative Unemployment, 1890 and 1900

Class or Trade	Percentage Unemployed		Increase: Per Cent of 1890
	1890	1900	
Classes of Trades, Both Sexes	15.1	22.3	47
Agricultural Pursuits	11.1	20.8	86
Building Trades	31.4	42.2	34
Domestic and Personal	18.9	28.1	49
Manufacturing and Mechanical	22.8	27.2	19
Professional Service	15.1	26.2	73
Trade and Transportation	7.9	10.5	33
Single Trades			
Agricultural Laborers	20.5	37.3	81
Farmers, Planters and Overseers	6.6	7.6	15
Lumbermen	30.0	30.9	3
Stockmen	11.6	15.3	32
Fishermen and Oystermen	40.4	46.3	15
Boilermakers	16.3	18.4	13
Engineers and Firemen (stationary)	14.9	17.7	19
Iron and Steel Workers	25.4	28.1	11
Machinists	10.8	13.4	24
Tin Plate and Ware	14.5	25.9	78
Gold and Silver Workers	18.7	25.3	35
Plumbers, Steam and Gas Fitters	13.4	22.0	64
Wire Workers	17.0	25.3	49
Brassworkers	13.2	19.6	48
Saw and Planing Mill	31.7	35.1	12
Brick and Tile Makers	43.6	48.4	11
Stone Cutters	30.3	39.5	30
Masons	43.0	55.5	29
Painters and Glaziers	31.2	42.4	36
Plasterers	42.9	56.1	31
Glass Workers (both sexes)	52.4	59.2	13
Leather Workers	20.3	24.8	22
Boot and Shoe	25.2	31.7	26
Rubber	31.0	38.0	23
Cabinet Makers	13.8	20.9	51
Upholsterers	15.0	20.9	39
Dressmakers	11.1	19.8	78
Milliners	13.5	25.9	92
Seamstresses	18.0	32.5	80

TABLE 68—*Continued*

Class or Trade	Percentage Unemployed		Increase: Per Cent of 1890
	1890	1900	
SINGLE TRADES—*Continued*			
Shirt, Collar and Cuff Makers	14.6	23.7	62
Laundresses	10.1	19.7	95
Silk-mill Workers	27.4	29.3	7
Servants, Male	9.7	17.0	74
" Female	7.0	14.8	112
Bartenders	8.9	12.5	40
Hotel, Boarding-house, Restaurant and Saloon-keepers (incl. House-keepers in 1900)	2.5	5.3	109
Agents, Bankers, Brokers, Officials, etc	4.2	5.9	42
Commercial Travelers, Salesmen and Saleswomen	5.7	8.8	53
Bookkeepers, Clerks, Stenographers and Accountants	5.1	8.2	61
Messengers and Office Boys	12.2	19.7	61
Sailors and Boatmen	28.8	33.3	15
Steam Railroad Employees	13.0	15.8	21
Telegraph and Telephone Linemen	10.5	15.8	50
Hostlers	10.6	14.7	39
Laborers, Male	33.4	44.3	33
" Female	22.6	44.1	95
Clergymen, Lawyers, Government Officials and Physicians	2.4	3.8	58
Musicians and Music Teachers	11.3	20.7	83
Teachers and College Professors, Male	30.8	55.0	78
" " " " Female	33.1	61.2	85
Printers, Lithographers and Pressmen	9.6	15.0	56
SINGLE TRADES SHOWING DECREASE IN UNEMPLOYMENT			
Gardeners, Florists and Nurserymen	13.3	12.9	9
Miners and Quarrymen	47.9	44.3	7
Hosiery and Knitting-mill, Males	31.5	20.3	35
" " " " Females	29.9	20.0	33
Woolen-mill, Males	22.0	19.5	11
" " Females	25.2	21.1	16
Glovemakers	38.8	17.1	56

TABLE 69

UNEMPLOYMENT IN TRADES UNIONS, NEW YORK STATE AND GREAT BRITAIN

Year	New York State [2]		Great Britain	
	Number of Members in Unions, per Thousand Population of State	Per Cent Idle on Day of Report	Approximate Membership of Unions Concerned (Aggregate)	Per Cent Idle
1897	20.9	23.4	......	....
1898	25.6	20.0	......	....
1899	27.3	13.3	......	....
1900	31.7	18.9	530,000	2.9
1901	33.3	12.1	545,000	3.7
1902	39.0	9.3	550,000	4.4
1903	46.2	10.5	555,000	5.2
1904	46.8	18.7	570,000	6.5
1905	45.6	9.9	580,000	5.4
1906	45.4	7.8	595,000	4.1
1907	47.6	14.8	630,000	4.2
1908	43.0	29.3	650,000	8.1
1909	40.0	15.6	695,000	7.7
1910	46.7	14.8	700,000[3]	4.8
1911	50.5	15.6	......	....

[2] From Bulletin 109, Bureau of Labor Statistics.

[3] First seven months.

But the statistical evidence is not all to the effect that general unemployment is increasing continuously at exactly the rates indicated in Table 68. In Table 69 are given data derived from the trades-unions of New York State (as representative of several individual States which supply data) and of Great Britain. The growth of unemployment from year to year, as revealed by Table 69, is not a regular advance, but it is none the less a general and unmistakable one.

Recent History of Unemployment.—From the panic of 1907 (which was reflected even in Great Britain, by the virtual doubling in 1908 of the average figure for the preceding eight years—a jump not paralleled in this country) down to the war-stimulation of 1915-16, was one of those periods of virulence of unemployment. It was in the midst of this period that the census for 1910 occurred, from which we should have gotten so much light, but got none.

By the winter of 1913-14 the situation had gotten very bad, involving riotous demonstrations upon the streets of New York and other cities, the invasion of the churches with demands for work and shelter, and the formal installation in New York of the "Hotel de Gink," to provide opportunity for self-help in communal house-keeping by the homeless. A brief review of this picturesque year in American economic history, as culled from the headlines of the conservative daily press, follows in itemized form.

1914.	January	10. Six Thousand Applicants for Work Mob the Ford Works in Detroit. "Six are hired."
1914.	"	29. Mass-meeting of Unemployed Women at Cooper Union.
1914.	"	30. Problem of Unemployment discussed in the Mayor's Reception-room, City Hall, by city officials and prominent citizens, and the Mayor asked to appoint a Permanent Committee on Unemployment.
1914.	February	9. Seventy-five Thousand Out of Work in Philadelphia.
1914.	"	12. Counter-riot at Ford Works, to warn Unemployed away.
1914.	"	17. Five Hundred St. Louis Homeless parade to City Hall and appeal to Mayor for Work.
1914.	March	3. Tannenbaum and his "army" propose to adopt force in seeking work.
1914.	"	5. Tannenbaum and 189 of his followers (homeless unemployed) arrested in the Church of St. Alphonsius.
1914.	"	9. The rector of the Church of the Ascension and the Vicar of St. Luke's entertain over a hundred unemployed for supper, lodging and breakfast. Other ministers meet and debate the problem of unemployment.
1914.	"	28. Tannenbaum is sentenced to a year in jail. (Sheriff Kincaid, of Jersey City, commends Tannenbaum, on July 28, 1915, as being a man, a fighter and not a liar.)
1914.	"	17. The State of New York transports sixty-eight men and five women "up-state" free, to provide work on farms. About half of these are hired by the farmers.
1914.	"	19. Sacramento Fire Department routs Kelley's Army of 1500 Hoboes with Fire-streams.
1914.	"	22. One Thousand Anarchists march up Fifth Avenue, New York City, singing the "Marseillaise."

1914.	"	20.	Three hundred I. W. W. invade a Socialist meeting on Unemployment at Cooper Union.
1914.	"	28.	Pennsylvania Railroad drops off 38,000 men and the New York Central 25,000.
1914.	"	31.	Erie Railroad lays off more than 18,000 men.
1914.	June	5.	Five hundred thousand employees of western railroads reported out of work.
1914.	September	15.	Vienna orders her police to prevent street-parades of the Unemployed.
1915.	January	1.	New York Mayor's Committee seeks aid from the Bankers for loans to the Unemployed.
1915.	"	14.	Mayor of New York summons the heads of the Departments and demands work for the jobless. At about this same time the Department of Docks and Ferries drops a large portion of its men from its employ.
1915.	"	9.	State of New York dismisses four hundred men from its pay-roll.
1915.	"	27.	Colonel Theodore Roosevelt gives $10,000 in aid of the Unemployed.

A general consensus of the estimates as to the number of unemployed in New York City alone, early in 1914, would range from about two to five hundred thousand. It was undisputed that the bulk of these were men having families and normally maintaining homes. Many were respectable women. There were many individual cases of actual starvation and suicide, with deaths among the children medically reported as due to malnutrition. *Yet our statistics as to national food-supply show no slightest sign of a dearth of food at this time.*

A special investigation of unemployment in New York City was undertaken by the federal Bureau of Labor Statistics, aided by the police, and reported in Bulletin 172. This investigation (dated January thirtieth, 1915) covered 104 representative city-blocks and 3705 individual tenement-houses and dwellings in addition. At about the same time the Metropolitan Life Insurance Company, through its interest in its holders of industrial policies, conducted an investigation of those residing in New York City, and another covering northern New Jersey adjacent to the city. The results of these investigations are reported in Table 70.

Quoting from the Bulletin:

> "In addition to the number shown in the above statement there was known to be considerable unemployment among the class designated as homeless—those without a fixed abode,

who slept in cheap lodging-houses, immigrant-homes, lodging-house shelters, missions, employment-agencies, back-rooms of saloons, etc.”

TABLE 70

UNEMPLOYMENT IN NEW YORK CITY AND VICINITY, 1915

	Federal Data	Metropolitan Life	
		N. Y. City	Northern N. J.
No. of Persons in Families enumerated.....	229,428	....	....
No. of Wage-earners in Families enumerated	95,443	252,912	97,026
Per Cent Unemployed..................	16.2	18	15

A census taken on the night of January 30, 1915, found 269 at the Farm Colony of the Department of Public Charities (virtually paupers) and 628 at the Ellis Island immigrant-station—these two lots being outside the proper limits of the normally unemployed. In addition there were found 1831 in the Municipal Lodging House, 183 in immigrant-homes, 19,486 in cheap lodging-houses, 135 (including 17 women) sleeping in employment-agencies—a travesty upon the name—1520 (including 130 women) in missions, 341 in back-rooms of saloons, 320 in the midnight breadlines and 23 on the thoroughfares, bridges, docks, parks, etc., without shelter, including one woman in each of the last three lots.

> “It was impossible to ascertain how many of these had any employment, but it was safe to state that a very large proportion of these persons were without employment of any kind. . . . Information as to the length of time out of work was had from 14,916 of them, as follows:

1 to 30 days	1 to 7 days...........	6.6 per cent	23.0 per cent
	8 to 13 “	4.4 “ “	
	14 to 30 “	12.0 “ “	
	31 to 60 “	20.6 “ “	
	61 to 90 “	16.5 “ “	
	91 to 120 “	12.9 “ “	
	121 to 180 “	15.3 “ “	
	180 and over..............	11.1 “ “	

> It will be noted that the largest number and percentage of persons out of work, both male and female, had been out of work from 31 to 60 days. . . . The unemployment, therefore, began to be most acute in the late fall or early winter, a period when work in many outside industries under normal conditions is falling off, and this unemployment was undoubtedly due to a considerable extent to the usual slack season."

The data connected by brackets we have added to the quotation. They show that, *if one compares equal periods of time,* the largest percentage of unemployment is for less than thirty days. This is as to be to expected, without any reference to season whatever.

Here crops out again the familiar explanation of unemployment as being due to *season*—one of those lazy, superficial guesses which form the stock in trade of the average person who explains glibly other people's troubles. But in another connection this same bulletin publishes the following list of percentages of unemployment in the several trades, displayed in Table 71. If there be anything in the season-doctrine a comparison of the different trades, which are affected so differently by seasons, should certainly show it.

TABLE 71

Unemployment and Seasonable Trades, 1915

Percentage of Unemployment in

I. Trades Repressed by Winter Weather		II. Those not so	
Five Building Trades	32%	Bakers	16%
Chauffeurs	28	Bartenders	14
Laborers	34	Cigars and Tobacco	16
Marble and Stone Cutters	47	Cooks	18
		Dressmakers	20
Average of this Group	35%	Elevator-tenders	21
		Longshoremen and stevedores	16
		Machinists	13
		Stenographers, etc.	7
		Waiters and Waitresses	17
Average of All Trades	25	Average of Group II	16%

In Table 71 this list of trades is segregated into two groups. One of these groups is subject to repression of activity by winter weather; the other is not so. A comparison of these groups shows that season does exert its effect upon employment, but only to the extent of explaining about half of the unemployment in those trades which feel the winter, and these trades are but a minor factor of the whole. In other words, a census of unemployment taken in the winter showed that, among those trades affected by winter, 54 per cent might be attributed to the weather, because the remaining 46 per cent just paralleled the unemployment prevailing in indoor trades.

Since unemployment is a varying phenomenon anyhow, based upon an average degree of commercialism, this leaves the average of winter and summer unemployment 73 per cent of the maximum for winter in those trades which feel winter. In general, then, only about one-quarter of all unemployment may be attributed to season. The other three-quarters constitutes our remediable problem in social reorganization.

A Continual Deficit in Employment Indubitable.—Reviewing all these statistics broadly, it becomes unquestionable that there normally exists a perceptible fraction, to be roughly estimated at from one-tenth to one-fifth, of all working-people who cannot find employment at all during an appreciable fraction of the time. There also seems to be evidence (although not fit for statistical presentation) that it is the *relative fraction* of idle time, rather than the relative number of people totally unemployed, which is on the increase. But between these two sorts of enforced idleness it is hard to distinguish accurately. Certainly the *qualitative* deficit in employment is increasing.

False Explanations of Unemployment.—A glance over Table 68 will show that there is little indication of any general rule guiding unemployment. There is certainly to be found in it no justification for many of the explanations which have been offered, of which the following are familiar instances:

(1) *Seasonal Trades.*—Thus, those occupations which show the highest absolute rates of unemployment happen to comprise the building-trades; yet we may not jump from that fact to the conclusion that it is because of season, or because of outdoor work, that they are idle; for the highest rate of idleness of all is exhibited by the teachers, who work indoors and

are engaged by the year, with a close second in the glass-workers, who also work indoors.

(2) *Incompetence.*—It cannot be ignorance which begets unemployment, because it is the teachers and the college-professors who incur the highest rate of unemployment of all. On the other hand, it cannot be their over-specialization which explains their idleness, because it is the unskilled laborers—the class which can and does flow most readily from industry to industry, without regard to its technique—who follow the teachers closely in their high percentage of unemployment.

(3) *Domestic Service.*—Then the domestic servants, which every housewife will tell you are increasingly hard to get, show *the most rapid increase in unemployment of any,* although not a high absolute percentage. In short, the person who starts out with the idea that unemployment exists only where the employers are surfeited with help, or that it has any direct and simple connection with any obvious, natural or human sentiment, is destined to a baffling disappointment by the facts —until he accepts the views as to the complex source of unemployment, in general commercialism, set forth in this book.

Natural Gravitation in Unemployment.—Two features of Table 68, however, are well worthy of mention. First, *it is those trades wherein unemployment is least which show the most rapid rate of increase in unemployment,* and vice versa. This shows that unemployment tends to distribute itself as evenly as possible, in a roughly stable but fluid equilibrium. In short, unemployment is a purely mechanical and fluid, and not at all a psychic, phenomenon.

Secondly, *unemployment is greatest in the productive trades and least in those lines of activity which are more or less closely associated with commercialism*—agents, brokers, commercial travelers, salesmen and saleswomen, book-keepers, clerks, stenographers, printers and lithographers. *Yet the statistics in this book go to show that all of these latter occupations have been growing much more rapidly than have the productive trades.* In fact, the productive trades have been decreasing.

Surplus Labor.—This last fact is of the greatest significance in explaining, at least, what is *not* the cause of employment, namely, over-plentifulness of labor. For if plentifulness of labor, or the lack of it, had anything to do with the degree of unemployment or its opposite—if there were any foundation whatever for that most persistent of all popular superstitions, namely, that unemployment signifies the presence of too much labor—*then this situation must have been exactly reversed.*

That is to say, those occupations which have been steadily losing workers—the productive ones—would exhibit the least unemployment, because their "surplus" labor would have departed. Those occupations which have been steadily receiving accessions for decades—the commercial ones—would show the most unemployment, or symptoms of "surplus" labor. *Yet the truth is the exact reverse of this!*

Cause and Effect in Unemployment.—This proves that *unemployment is the cause, rather than the effect,* of any local surplus of labor. Unemployment, *arising from sources which are quite apart from any question of quantity of labor offered, or of psychology within the laborer,* drives labor away in fright.

The unemployment comes first. The surplus of labor then arises, as a result.

This surplus finally becomes sufficiently menacing to drive labor away. But a result cannot transcend its cause. The surplus of labor cannot exceed the deficit in employment. Unemployment cannot frighten labor away so fast that full demand replaces it; for as soon as the departure of the first labor has reduced somewhat the unusual degree of unemployment, then the fright and the flight will be allayed together.

In short, labor does not like to move, any more than any other known thing. It possesses inertia. There is no more chance of any mere whim simultaneously animating large bodies of labor into inexplicable migration, so as to leave a dearth of labor and a minimum of unemployment behind them, than there is of a cold locomotive's suddenly conceiving the desire and the power to move off down the track.

The True Nature of "Surplus Labor."—The facts are these. Commercialism, having first produced artificially a general deficit in hiring-power in all occupations, then distributes it still more artificially, so that there is a constantly growing demand for effort along commercial lines, and a decreasing one along productive lines.

But labor does not enjoy responding to this bait. That love of craft which is deep-seated in every wholesome soul, and the subconscious preference of the human instinct for that which is productive, helpful and sincere, over the insincere, combative callings of the commercial world, puts a tight brake upon this migration out of productive and into commercial walks of life.

Hence labor clings to its craft until the growing menace of unemployment, if one remains, becomes too frightful. Then it departs with regret; but so slowly as to leave always behind it a major percentage of unemployment, as the deterrent warning the next reluctant laggard to hasten his abandonment of his art.

Conversely, the deficit in employment prevailing in commercial fields must be less than that prevalent elsewhere, before it can attract labor into its less humanly attractive, if more lucrative, occupations.

Labor is plentiful here or lacking there, not according to its whim, but according as the volume of employment offered attracts it one way or another. But it migrates with difficulty, experiencing resistance from the psychic inertia of man, and from labor's wholesome love of its craft. Hence a surfeit or dearth of labor appears in spots, as the push from behind or the pull from in front respectively—so to speak—needed to propel the migration. A relatively greater local degree of unemployment signifies a *plus economic pressure, forcing labor out,* while a point of relatively less unemployment is a *low economic barometer, drawing labor in.*

But the pressure comes first, in the form of unemployment. The migration follows as a result. The laborer is a pure puppet, impotent to create or destroy, when employment or unemployment is involved.

This situation is the exact opposite of the popular concept of unemployment, even among the educated. For the latter regards points of greater unemployment as those toward which labor, impelled by some unexplained mysterious impulse to do what is wrong, is flocking—in an abnormal and reprehensible whim which only needs benevolent correction by word, from the superior reason of others who do not have to earn their living. Conversely, points of less unemployment this concept regards as those whence labor has perversely and exasperatingly departed, in equally reprehensible whim.

Yet exactly the opposite is the truth. It is labor which, responding more to the idealistic love of craft and less to those sordid considerations which are supreme in the commercial world, moves actually in the direction relentlessly impelled by society's awards of job and pay; yet ever tries, with an instinct which is unerring in its accuracy, although in vain, to stay by its craft and do its best for society.

If this were not so, if labor were not attempting to stand by, at its post, with the fidelity which should earn monuments, then we should find the statistics recording the least unemployment in the productive trades, whence all surplus labor had fled in search of the golden fleece; while in the commercial world we should find the maximum unemployment, due to man's greater worship of mammon than of art. *But the truth is the exact opposite from this.*

Automatic Involuntariness Again.—In its broadest aspect, this fact, when once understood, corroborates our conclusions from every other economic paradox which has been analyzed herein. This is to the effect that the forces which are driving and guiding humanity along those lines of social evolution which are now molding civilization into the modern social problem, *are all of them institutional and none of them psychic in character.* That is to say, man's individual psychology acts merely as the inert clay in the potter's hands, determining by its plastic nature what may or may not be molded, but supplying in itself no motive force whatever.

The origin of these forces is largely human, of course; but the time, place and manner of their origination is remotely distant from their effects. The transformations of energy occurring between the coal-mine, as an origin, and the swiftly moving train, the brilliance of electric illumination or the silent power of the wireless over storm, darkness and distance, as results, are no more intricate, and not nearly so difficult to trace, as are those intermediate between the apparently innocent commercial acts which beget unemployment and the social and ethical results which they entail.

To the overwhelming power of these gigantic institutional motive forces the psychic instincts of microscopic man offer every resistance within their power—and always in the most wholesome direction. But in vain. The icicle might as well defy the April sun as mankind try to defy the softening, degrading temptations offered by commercialism. There is only one thing to be done against commercialism, and that is to abolish it in entirety.

Unemployment even in the Commercial World.—Yet even in commercial ranks there is some unemployment. The drift of population from production to commercialism, while below proportionality to the inducement, is yet great enough to show the surplus over demand which permeates all classes of economic society. Under commercialism, no degree of demand and no rate of pay—not even its own—can be high enough to annul all unemployment and attract in any given direction its full quota of labor, and no more.

Each increment in wage-demand for labor brings with it its increased deficit in the hiring-power of the Consumer's dollar, and this is then distributed fluidly throughout society. Therefore *it is merely the relative distribution of an always ubiquitous unemployment which statistics can record.*

Like every other attribute of commercialism, unemployment varies tremendously, now forcing itself upon public attention by its momentary virulence and again letting itself be forgotten. In picturing what we are to gain by the abolition of commercialism, one of the most important features to be imagined is that regularity and continuity of economic affairs which is now undreamed, amidst the constant turbulence stirred up artificially by commercialism.

Inanimate Unemployment.—Then our investigation of unemployment, which has been relatively complete in regard to persons, has taken no account whatever of that huge, but secondary, burden of unemployment—*the enforced idleness of lands, materials and appliances.* Nor is there space here for more than mention of the topic.

The idleness of valuable land is the foundation upon which the Single Taxers build their philosophies. Everywhere it is obvious. Everywhere it is a grievous burden. But after what has preceded here, it seems needless to state that it constitutes but one minor fraction of a very much larger single problem—that of a general unemployment of all aspects of social life, due to commercialism.

In our cities the vacant lots and half-employed sites constitute a flagrant waste of opportunity and a senseless burden upon our transit-systems (which must carry people past these wasted territories in order to land them at work or residence, already too widely separated). They are an eye-sore upon our civic dignity and beauty. In the country the vast areas of waste land to be seen within a few miles' radius of every large city stand as a puzzle to every economist—until he dares to grasp the nettly nature of commercialism.

As to appliances, on every hand one sees idle factories, idle sheds and idle wharves, rotting away in contact with an overpressure to find opportunities and means to work. Perennially economists and commercialists complain of "overproduction," and shut down a factory here and there to keep prices up to the profitable point. So common is this practice that we might establish, if we had the time, some fairly definite percentage of all tools and buildings idle in every line of work—necessarily idle in order to maintain economic equilibrium—under commercialism.[3]

Then there is the huge waste of materials, current everywhere, but chiefly in our big cities, due to the impossibility of utilizing a fair percentage of all by-product stuffs, while having to incur the commercial costs of doing so. Our sewers are sludgy and our harbors hideously slimy with material which is undesirable *only because developed in the hands of separately owned concerns devoted to the making of profits in other lines.*

This material is either too scattered in its source, or too bulky or dilute in form, or is adapted to feed other industries too remote in character or locality, to pay anyone to save, collect, sort, transport and transform it into something useful, *while having to pay interest-charges upon all the appliances involved and the costs of commercial competition with other sources of the same things.* So all this is thrown to waste.

Yet, given a factory-system organization of all industry, and the cost of utilizing this scrap would be repaid many times over. Our chemists and engineers stand ready to perform all manner of marvels in the production of wealth from dross, or in beautifying what is now ugly, if only the commercial bars to their doing so might be let down.

Then the gain to our cities in an esthetic sense, if not also in hygiene, would be great if this might be done. It is true that our city-governments now dispose of some offal, and render it to a degree into something useful, wherever its character is so offensive or dangerous to life that the demand for this work is imperative. But the interests of commercialism set all the machinery of politics into operation to prevent the city's proceeding further in this direction than is absolutely necessary, else the government would be found to be in competition with private—that is, profit-making—sources of supply of the things which might be developed. So our cities remain polluted with all manner of minor nuisances—to a degree which we shall soon regard, as we look back upon it, as medieval in character.

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[3] An investigation conducted by the New York *Times* and reported in its issue for January 15, 1914, corroborated a statement previously made by Congressman Humphreys to the effect that "123 pig-iron stacks, with an annual capacity of nearly 13,000,000 tons, had been blown out since March 1st." Then all possibility of useful deduction from this information is killed by an entrance into debate whether it were the Republican or the Democratic administration which was responsible for this situation!

Economic Paradoxes again.—The one point to be emphasized repeatedly is that, until one accepts the concept of commercialism as a convulsing social poison, rather than a food—as a disease which leaves its victim as contorted as does spinal meningitis—*every aspect of our economic interactions will be found to develop paradoxes.* Vacant lots will be found alternating with undesirably congested ones; modern skyscrapers will jostle old-fashioned three-story frames; coal-mines will remain undeveloped while cities are paralyzed by cold; tools will rust idly beside factories which cannot fill their orders; ships will waste their invaluable time in swinging at anchor, for lack of berths, in ports where wharves rot idly; prices will rise while supplies increase; the poor will live in hardship and die of want while the rich cannot hire help; and working-people will continue dazed between the finding one week that no one wishes their services, while on the next their effort must be maintained throughout a working-day far beyond their natural strength, else something dire will happen. These and a thousand similar paradoxes which confront us at every turn in our present-day world, and which stand to the average mind as proof that the other fellow is a perverse, greedy or malicious fool, may succeed sometime in persuading the thinking person that there are other and far more powerful forces at work, within our social reactions, than any mere psychology of the human individual.

The philosophy so popular to-day, which assumes to explain all evils and to prescribe all remedies as lying within the individual psychology, is misleading us into one of the most gross and cruel blunders of history. If history but repeats itself, this silly superstition is due to cost this country alone, through anarchy, famine and pestilence, ten millions of lives, before every American has left behind him, never to be lifted again, the unpatriotic delusion that, in his economic acts, he is a free agent and a private citizen, and that whatever may prove to be wrong must be due to somebody else's wickedness or incompetence.

Intellectual Responsibility and Patriotism.—It is usually true that only gentleness of speech begets a following. Pursuing this idea, this book has everywhere stood for the indictment of a wrong system, rather than the upbraiding of erring individuals. But if there were ever a place wherein this rule excusably may be broken, where stern rebuke is justified, it is when confronted with that combination of laziness of mind with recklessness of fact and moral irresponsibility, which is expressed in the remark that "all who wish work can get it."

For there is at present no menace to the stability of our government and our civilization to equal that which is potential in forced unemployment—and these words are written in the depths of the Great War, by one who from its first week has said that the world must unite to crush out its cause. *There is no such a breeder of degradation, bitterness, anarchy, atheism and all manner of violent philosophies, as well as of simple laziness, equal to enforced idleness or partial unemployment.* Its most innocent fruit, indeed, is sheer laziness.[4]

There is no other feature of social life which so fully explains so many undesirable incidents. Congestion in cities, graft in public offices, white slavery conducted by the men and prostitution by the women, gambling among both sexes, and squalor, display, pretense and insincerity everywhere—all are explicable as the acts of those who would naturally turn to more wholesome walks in life, were it not that *society condemns them to partial idleness and relative poverty if they do so.*

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[4] It is since these words were written that the world has been introduced to the word and the fact of Bolshevism. Bolshevism will never be brought under permanent control until it is understood, not as an insane whim, but as a natural phenomenon, an incident to world-commercialism. Bolshevism, while it exaggerates unemployment, is itself a fruit of forced unemployment and under-purchasing-power—of these things united with that socialistic philosophy which, lacking the ideas set forth in this book, forms the only nominally adequate reply to commercialism which is now available to the people. The error of this philosophy is debated herein in Chapter XXIV; but proving its error will not alter its attractiveness to the masses. Only the substitution of a more correct and humane, but *competent*, reply to commercialism can do that. This, too, is supplied later in this book.

The person who lightly asserts, without having investigated carefully, that unemployment is always voluntary, is not only guilty of a lazy untruth, but also of sheer treason to the state. He is inexcusably more lazy than he who seeks work without finding it. He is more a traitor to the stability of our government and liberties than is any "slacker."

Unemployment not due to Surplus Labor, nor to Labor-Saving Machines.—Only less guilty than these, and in the same intellectual class, are those who attempt to raise wages by the exclusion of additional labor, or of labor-saving machines, from rivalry with the labor already on hand. Such is often the narrow-minded policy of the labor-union movement, which has always sought to restrict apprenticeships, which has vehemently opposed the admission of oriental competition with American labor on the Pacific Coast, and which has finally secured the passage of a most unjust and short-sighted illiteracy-test for all immigrants. A latest instance of this blind policy is the race-riot of East St. Louis, in which many lives were lost in an effort to exclude negro laborers who had migrated thither from the South. Each month brings some sample of such news.

Ever since the rivermen of Cassel, Germany, destroyed Papin's first steamboat, in 1707, in fear that it would ruin their business, down to the present time, when hundreds of thousands of watermen are finding employment in steam-navigation to one so employed in 1707, labor has always been violently jealous of additional incoming labor, or of labor-saving machinery. And every time the sentiment has been due not to any natural harm coming from the additional labor, but to the artificial deficit in employment—created by commercialism, and not dependent at all upon the quantity of labor in the market—which the untutored workingman assumed would be accentuated by any increment in the supply of labor.

For every fact of history emphasizes the increasing advantages always enjoyed by labor, in the way of less idleness and a higher purchasing-power (if a lower figure) of wages, resultant from every increase in the amount of labor offered in market, or from each new labor-saving machine. *Prosperity grows with population.* The state should offer a bounty for each new birth. Boards of trade do now offer bonuses to attract population to their towns. The buildings of the Immigration Bureau, at Ellis Island, New York Harbor, should be labeled "Welcome!" in every language known to the high seas.

Modern Rights of Man.—So there direly needs to be a fresh statement and demand of the Rights of Man. As absolute pre-essentials to a normal, happy and useful life, under modern conditions, these things must be assured to each citizen by the state:

(1) *Full market-demand for the exertion of whatever capabilities each may possess,* with the Ultimate Consumer sanctified with authority as sole arbiter of the value of those capabilities.

(2) *Certainty of continuous employment.* No workman may be discharged from work. He may be shifted from one job to another, as his peculiarities may demand; but none of these shifts may be regarded as leaving him without a job and without pay; and this presupposes, of course, that his pay does not come out of the pocket of a private employer. His employer, instead of being an owner, must himself be on the same basis of pay (though not at the same rate) as the man.

(3) *Reward for his exertion with the full value of the result to the Ultimate Consumer,* instead of after the deduction of all sorts of costs for activities which the Consumer does not desire.

(4) *Certainty, granting the most ordinary industry and thrift, of provision for old age.*

(5) *Stimulation (for the first time in history) by the free and wholesome emulation of his fellows.* For commercial competition is the exact opposite of this. It represses where emulation stimulates.

It cannot be too emphatically stated, however, that *none of these rights is attainable by direct legislation.* The whole history of public works instituted in order to give employment, for instance, has been a failure. They have not only created social instability in other directions, but they have quite failed to diminish unemployment. This result is quite in accord with the preceding analysis of cause and effect.

Nor can any legislation aimed directly at the maintenance of wages, nor at a minimum wage, nor at the suppression of profits, nor at the taxing of incomes, be successful toward the attainment of any of these Rights of Man. The records are strewn with instances of failure in this direction.

But, on the other hand, *all of these rights will be assured to each citizen automatically, without enforcement by law, just as soon as ownership-in-industry has been completely abolished*—not in some tentative, local, microscopic way, at a rate lagging far behind the rate of growth of commercialism itself—but completely and effectively.

That any such a program involves questions of procedure of the most gigantic sort it is not sought here to conceal. But the first step toward economic freedom is to recognize the fact just stated—*that in no other direction, nor by any lesser degree of reform, can liberty be attained. Also, that sentiments are impotent against institutions.*

Technique of the Energetics of Unemployment.—Before finally leaving this topic of labor and employment a word should be addressed to those who may be professionally interested in the more technical theories of political economy. For it may appear to such a reader that the doctrine stated above as to unemployment constitutes a reversion to the old and discredited "wage-fund" theory of employment.

It does not, however. The wage-fund, as a concrete sum of money available for hiring labor, has properly been discredited. But, on the other hand, the view of employment as dependent upon a definite current of *economic energy,* amounting to some determinable percentage of the total energy currently put forth (of which energy money may or may not be in a fair measure), is merely bringing economic science into line with the modern aspect of all other energetic sciences.

For when we recognize the volume of employment as produced by the co-operative energies of the productive Consumer, as restricted or dissipated by the combative energies of the commercial Consumer, and as expanded or contracted from day to day by the expansion or contraction of the volume of popular credit, acting as an economic catalytic, then we are merely recognizing social energetics as one branch of the parent science of cosmic energetics. We are assuming merely that employment is a phenomenon guided and controlled primarily by those basic principles which prevail in all the energetic sciences, namely, conservation, dissipation, cyclical transformation, etc.

It is therefore proper to note, as a parallel instance of this, that recent progress in the science of thermodynamics, into a better recognition of its unity with that of mechanics (as the foundation of all the energetic sciences), has shown a marked similarity with this question of employment in economics. For, according to Professors Callendar and Soddy, of London and Edinburgh respectively, recent conclusions have brought out *modern concepts of heat tending closely back towards, but not quite to, the early crude concept of heat as a special form of matter—caloric.*

It happens that, in support of this general view, the author has been urging for twenty years past that entropy, the mass-factor of heat—which has been regarded ever since its discovery by Clausius, in 1865, as merely a mathematical function—possessed physical reality and was identical with the mass-factor of mechanical-energy: mass-pairing. This comes pretty near to stating that quantities of heat must represent quantities of matter.

Again, in the same field, come Professors Poincaré and Planck, of Paris and Berlin respectively, debating the new concept of "quantums" of energy, as basic attributes of small units of mass. And Professor Callendar says that the entropy of heat-energy, the electrons of electrical energy, and the mass-units of mechanical energy, are all one in kind. All this brings one back pretty closely to the old concept of heat as matter (caloric).

Yet this reaction in scientific concept is not complete. Heat is still regarded as energy. The new doctrine is merely a reminder that, in abandoning the error in the old, we have wandered too far in the new direction taken toward truth.

Thus it is frequently the case that earlier hypotheses which have later become discredited, by some addition of a minor sort to our knowledge, or by some new classification or definition of principles, prove ultimately to have been based upon a partial grasp of the true nature of the thing, however prematurely and inadequately defined. It is so with heat. While heat is now known not to be matter, yet the early concept of caloric as a form of matter had much truth behind it. For our latest knowledge of heat identifies it as nothing more mysterious than a particular relationship between particles of ordinary matter.

The same thing is true of electricity. Long known as "the imponderable fluid," as "pure energy," as a "stress in the ether" and by other equally abstract definitions, electricity is now known to consist merely of the relative displacement of electrons; and it is also known that electrons consist of ordinary, ponderable, unmystical mass, quite like that of a rifle-bullet or a hammer-head except for size and velocity, which is measurable in proportion to that of chemical atomic weights.

This general fact applies also to unemployment. While it is true that there is no distinct fund, such as a sum of money, available for hiring labor, yet *there actually is a definite, current proportion of the community's active energy, by which labor must be hired or else must remain idle.* This current proportion is a function, not of anything inherent in the personalities of either employer or employee, but merely of the size, at the moment, of a particular institution or relationship—the commercial one—prevailing between quite ordinary human beings.

In this fact this current fund of hiring-energy is quite in parallel with every other known form of energy, for all of these reduce, upon analysis, to mere *forms of relationship between particles, none of which particles possess the attributes of the energy itself.* Therefore this hiring-energy of the sociodynamic system must be regarded as controlled by the same fixed, natural laws as any of the other energy-funds of the universe, and must be debated in the same terms.

Social Energetics.—In attaining to this view of the sources of employment and unemployment we shall have made our first certain step into that new science of energetics which is only now being formulated—that science which is destined to form the diadem crowning the circle of the natural sciences of inanimate energetics—*the science of sociodynamics, or social energetics.* Our material for it is now embarrassingly ample.

In the science of mechanical energetics we deal with relationships between component mass-portions each of which we can see, identify and enumerate. In that of thermal, chemical and electrical energetics we deal with the mass-action of vast communities of individual mass-particles, each too small to be seen or identified, yet too numerous to be counted—except that we estimate their number as far exceeding that of the entire world of human beings. Yet we are forced to regard each individual molecule as probably different from every other.

So now we arrive at a science of energetics—the social one—which deals with the interrelational energies of a vast system of unknown individual mass-particles of society, too numerous in aggregate to be estimated more closely than in millions, yet the individuals of which can, to a degree, be identified, seen and known as such! There is no imaginable field for the pursuit of knowledge so fascinating as this. It is one of the functions of this present book to lay a firm foundation, so far as American economics are concerned, for the later rearing of this new science of social energetics—which shall guide the ship of state past wars and revolutions as the older science of astronomy guides literal ships past islands, reefs and shoals.

Relativity.—It is some two years after the above was written that there appeared, in November, 1919, the front-page furor of the scientific world over the corroboration, through the solar-eclipse photographs taken the previous May, of the "relativity" theory of light which was published by Einstein (I understand) in 1913. The impression made by this new philosophical aspect of matter, energy and gravitation has been marked. University-halls and social dinner-parties alike are keen for the new idea.

Yet the revolution in physical concept enforced by this corroboration of Einstein's theory as to light and electricity alone, is merely that which the author urged as to mechanics, heat and chemical energy over ten years ago, and which he is urging in these pages as to sociology. The author's views upon relativity as the basic concept for comprehending the sciences of mechanics, thermodynamics and chemistry, if not also sociology, were published in 1908, in his book entitled "Energy." His preliminary views as to the physical reality of entropy, and its identity with mechanical mass, were published in 1902, in his "Thermodynamics of Heat Engines."

In the book of 1908 he established mathematically the "mean energetic condition" of matter as that existing between a pair of associated quantums of mass, *neither of which associates possessed any attribute whatever except mass-quantity.* He defined this medial relationship as the basic condition of all forms of matter, upon which must be built all of our concepts of its various attributes or qualities, and of its energetic action in any field of science whatever.

It was upon that basis that the author built his mathematical definitions of mechanical energy—and, from that, the concept of heat as an energetic relationship between molecules in innumerable separate masses—in the face of a complete lack, in our text-books of thermodynamics, of any exact definition, or even concept, of either mechanical or thermal energy. It was from this basis that the mystical factor of thermal energy—entropy—takes on immediately a clear and obvious physical reality, as the mass-pairing factor of molecular energy.

With this basic idea of inanimate energies as mere *relationships* between component individual particles, *none of which alone can possess either energy or any other attribute except inert quantity,* once in mind, all of the mysteries of mechanics and thermodynamics open their doors. The author always introduced it to his every undergraduate class in thermodynamics as the prefatory idea, instead of the ultimate mysticism, and never failed to find it comprehensible and illuminating to his young pupils.

In all of our natural sciences, and particularly in social energetics, our basic concepts *must* undergo this same transformation, if we are to accomplish anything deserving self-respect. Our habit of attributing all qualities and actions to something inherent in the individual must be abandoned, as cruelly misleading.

The absolute concept of the individual must be dethroned in favor of the new concept of *all* energetic manifestations—whether in the fields of mechanics, economics, ethics or moralities—as manifestations merely of ever changing *relationships* between individuals, the nature of which individuals changes very, very slowly, from century to century, if at all. There is no field of scientific thought in which the impotence of the individual, and the importance of the relationships between individuals, is so basic and so illuminating as in social energetics. In material energetics it is now supreme. In social energetics it soon will be so.

(These last lines following the subhead "Relativity" have been added in November, 1919, following the advertisement of Einstein's well deserved fame. But it should be a matter of interest to Americans that the lines above that subhead were written in a New York City skyscraper-office long before then. The 1908 book carries its own evidence; but it should be stated here that the outline of mechanical and thermodynamic philosophy published therein was regularly taught by the author to his every class at the Worcester Polytechnic from 1900 to 1906. All these mutual corroborations should add weight to the argument of this book.)

CHAPTER XXI

PANICS AND CRISES

It was stated above that the volume of employment available at any time depended upon the momentarily prevailing *rate of change* in the credit-barometer. Now this is a barometer peculiar in the fact that it rises slowly and then drops suddenly. The alternations of these two processes, occurring fairly periodically, bring, or express, corresponding waves of good and bad times, with corresponding minimum and maximum points in that deficit in employment which never disappears entirely. Every period of prosperity ends suddenly in a panic or crisis, and from every panic or crisis the commercial world climbs slowly back to prosperity again.

Usually the period of prosperity preceding each panic of our past history has been begotten by war. War arouses public confidence, through patriotism, to a degree unrivaled by any other means yet discovered. This intangible, all-pervading, aggressive confidence then expands correspondingly the country's fund of tangible credit-instruments, usually first by governmental issue, but secondarily by private issue. These credits then enter the market as additional circulating-medium and stimulate demand for many commodities. The money earned in supplying these is finally passed around, active demand spreads to all commodities, prices rise, labor is in demand, and by the time the war is over commercial prosperity has been fully established. This has been true of every social convulsion of the last four generations.

But it must not be forgotten that no conceivable degree of destruction of commodities by the war could have created any demand for the manufacture of new to replace them, *had the credit-issues not been there to serve as circulating-medium;* and secondly, that the credit-issues required, in order that they should be good and stable, *only mutual confidence on the part* *of the people.* For all other factors except this confidence had been there before the credits and active purchases began.

Such was the case in this country, for instance, in and after the Civil War. During this war the government issued credits at a rate quite unparalleled in our previously modest financial history. The amounts per capita would look small beside modern data, but they were no less remarkable in comparison with what had preceded.

Then, before the war was finished, the business-people found that this game was a good one. These credits would buy goods in enormous quantities and keep factories busy. Profits could be made upon them, even bigger than when relying upon the more direct methods of finance prevailing before the war.

So the new plan, after the usual fears and protests, was accepted and utilized to the utmost. By 1864, although the issues of the war then hung shrouded in the deepest gloom, prosperity was at hand in the North. By the time the armies had disbanded, in 1865, it was in full swing. Ever since then the financial world has practiced most industriously the profitable policy then inaugurated—of incurring huge debts, the interest upon which was paid immediately, and the principal ultimately, by the Ultimate Consumer.

The same was the case with the Cuban War of 1898, to a degree which none can realize except those who have lived through it. Before that war American public confidence had reached its lowest ebb. The era of graft and corruption which came as a reaction from the patriotism of the Civil War had humiliated every American citizen before the world. Our local and federal governments were commonly spoken of as rotten, our navy puerile, our merchant marine gone, our exports small, our diplomatic service far inferior to that of Europe, etc., etc. One could scarcely find an American who would admit our ability to compete with Europe in any line of human effort except agriculture.

In addition, we were just recovering, when the Cuban war-cloud gathered, from the commercial panic of 1893. Our financial confidence was as low as our political.

Our lack of patriotic faith naturally begot a similar feeling toward us abroad. All over Europe (except in England) the belief was common that Spain would march across the States to Chicago.

But the few months of war transformed all this gloom into radiance. Our naval victories had been phenomenal. Our losses by land, due almost entirely to sickness, had revealed gross corruption, it is true; but in overcoming it we had found ourselves. Business was good and steadily growing better. We were exporting in large quantities such things as locomotives and machine-tools—articles which had been regarded before as hopelessly superior abroad, in price if not in design and workmanship. Finally came the spectacular expansion of capitalism which has already been cited, responding to the urgent demand for commodities, and the boom was launched which swung forward, with but one brief pause, until the panic of 1907.

This same sequence of prosperity to war or revolution has been true also of earlier wars and other lands, but to a lesser degree as we recede from modern commercial conditions. The phenomenon is easily discernible in the French Revolution, in the rapid rise of the nation's finances from the Directorate—when reorganization was undertaken by a government so poor that its officials sat in a bare room, at a rickety table borrowed from the janitress—to the transcendant confidence and prosperity under Napoleon a few years later.

It was remarkably visible, again, in the rise of France from the horrors of defeat by the Prussians in 1870, and from the famine of the Commune in 1871, when dogs and rats commanded high prices as food, to her position of a few years later, as banker for the world. Weighted with her staggering burden of indemnity to Germany and cowed by defeat, nevertheless Thiers, by an appeal to sheer patriotism, to be expressed in the economic field, led her up into solvency, liberty and prosperity within a decade.

The close of a war or revolution—a form of social convulsion always accomplishing automatically the abolition of some grievous burden blocking life—always leaves a people with a sense of relief, as of a human individual after nausea, yet in a state of stimulated hope, with confidence as to the future dominating all present pain and gloom. The recent destruction of life and wealth by the war then exerts no perceptible retardation upon the general sense of prosperity. Its utmost extent is incomparable with *that which has been brought into existence by the mere fact of patriotic mutual confidence and credit amongst the people.*

Even defeat, if bravely borne—as French experience has thrice shown us—is little bar to a prompt return of prosperity. Indeed, victory, as German experience since 1870 has shown us, and as the shameful history of the American Republican Party after Lincoln's death demonstrated, is the more dangerous alternative.

After war is over an era of expansion follows. Everyone is ready to undertake new enterprises, sure of the ability of the people to absorb the output. Each issuer or acceptor of new credit-paper is ever feeling more boldly for the limit. But as each new issue, if accepted, provides an additional foundation for the release of still greater social activity, for still wider confidence and for still larger issues, the growth is cumulative.

As this process is an exceedingly profitable one to those who issue the credit-instruments, expansion at an accelerating rate is inevitable. Then all that a man needs do is to print this credit-paper with sound judgment as to what the people will accept, divide its value with him who first accepts it, and the fact that it is already "in circulation," and paying its interest-charges, makes it acceptable to all others. *The conspirators have thus literally "made" money.*

According to the commercialists themselves, over ninety-five per cent of all our circulating-medium—just as much the country's money as are the coins struck from the mint—consists of instruments in the creation of which not one whit more of equity to the people than this was ever embodied.

This does not mean that the issue of credit-instruments does not serve a public need. Credit in adequate volume, as was demonstrated above by the simile of the twenty men, is one of the first essentials to the life of the modern populous, complex community. But what it does mean is that the need for credit is a public need, and not a private privilege; and that *the creation of credit, whoever may print and issue the slips of paper, is a public act.*

It is not the printing and issue of the securities, but their acceptance, and their redemption by productive effort on the part of the general public, which alone creates their social value. The issuer of credit-instruments should no more be permitted to sell them, nor to draw interest upon them, than should the maker of a dime, or a locomotive, or a sewer, or a postage-stamp.

It is also to be noted that the value of all credit-instruments, of whatever sort, whether postage-stamps, stocks, bonds, bank-notes, personal commercial paper or gold-certificates, rests squarely, at bottom, *only upon the general wealth and activity of the country as a whole.* They are expressions not merely of the fertility of all the farms, mills, railroads, etc., as material appliances divorced from humanity, *but of the amazing productivity of a population which is at once politically free and confident in spirit to co-operate in their use.*

Therefore, when they collapse in valuation, no careful person will think of attributing the fact to a fault in our material appliances, but merely to the fact that our spirit of co-operation is not as complete or certain or intelligent as had been thought. The panic of 1873, for instance, is commonly and carelessly attributed to an excessive rate of railway-building during the preceding nine years of active prosperity. But the facts do not support any such a superficial, materialistic theory. The data as to railway-building, given in Table 5, do not reveal any abnormal rate during this period, as compared with other periods which did not end disastrously.

Economic phenomena are never so simple and obvious as all that. They are always natural, based always upon a wholesome individual psychology underneath; but they are always intricate in their reactions between those individual psychologies, enforced by intricate institutional relationships.

Then even the privately issued credit-securities of to-day, it must be remembered, are not issued, in fact, against the wealth privately owned by the agent of issue, as is so widely supposed to be the case. This is one of the most widespread of economic errors.

The stock issued by a railroad, for instance, cannot possibly be made good by any amount of skill and industry in the operation of the road alone—although, of course, blunder or negligence on the part of the road can always spoil it. What makes the stock good *is the industry and integrity of the mass of shippers who use the road.* The paper is issued, in reality, upon the public confidence of the entire population served by the road; for it is this alone which gives value either to the tangible property owned by the issuing agent, or to the paper nominally based thereon.

The Inevitable Fate of any Cumulative Expansion.—The process of cumulative and accelerative expansion of credit-paper described above can meet but one end. Whether stimulated by the interest borne thereon, as was chiefly the case in 1870, or by the prospective creation of both principal and interest, as is true to-day, the process is certain to overstep the limit of the people's endurance.

The end may come in any of a thousand different ways—probably not twice alike, in detail. But however it comes, some issue some day proves to be unacceptable and breaks in valuation. With it goes a lot of other delicate issues which had been floated with difficulty, and then the whole balloon-like structure collapses through contagious panic. The crash is as cumulative as the expansion had been, but far more rapid.

Such were the collapses of 1873 and 1907, two of the most pronounced in our financial history. But here the similarity between the two panics ends; for in the two cases *both the form of credit-instrument and the cause of collapse were quite different.*

In the first case it was *credit-currency* which swelled until it burst. In the second it was *industrial credits,* in the form of interest-bearing commercial securities, which gave way.

In the first case it was the ratio of volume of credit-currency to gold which was stretched too far. In the second it was the ability of the people to pay interest, dividends and commercial costs which was trespassed upon too far.

While this contrast may not be stated too rigidly, because in both cases both factors were at work to some degree, yet in general it is true. In the first case the crisis was precipitated nominally by the building of railroads faster than those agricultural and industrial developments upon which railroads must depend could grow; but in reality it was due to the faulty method of their finance, and to the widespread fear of the currency. For at that time bogus money was a familiar institution. Nearly every house sheltered some samples of the worthless Confederate money, as well as a few instances of bills issued by northern State-banks which were equally worthless.

In the second case the cause was quite different, lying merely in the inability of the people, through the steadily declining purchasing-power of the dollar, to carry the increasing burden of commercial costs. In 1873 prices were falling; so this sort of a burden could not then visibly appear. But in 1907 prices were already rising rapidly, and visibly contained the seed of discontent and distrust.

In 1873, from whatever source the pressure may have come, it found the currency and the banks the weakest links in the economic system. Therefore the currency collapsed, gold went to a premium and many banks failed. But in the panics of 1885, 1893 and 1907 all this was decreasingly true. In the "Silent Panic" of 1914 there was hardly a trace left of either bank-failure or currency-collapse. Yet it was an indubitable crisis, if not a panic.

The inflation which preceded the panic of 1873 took the form of an over-issue of bank-notes without proper basis in gold. While the modern menace of an over-issue of industrial securities, with its resultant deficit in the purchasing-power of the people, was already present in rudimentary form, yet it was still a feature of minor importance. While it was true that the commercialists were building railroads too fast, yet disaster arose neither from this physical cause, nor for the reason prophetically visible in the too rapid expansion of our own day, namely, a too great burden of interest.

The real trouble was that, lacking our modern system for the expansion of credit by the unlimited issue of private securities based upon material appliances, yet measured in reference to a broad and firm gold-backed currency, *the only way to extend the country's credit was to borrow outright from the banks.* The only way in which the banks could—and naturally would—respond, under the laws then existing, was to issue more paper-currency against a fixed basis of gold. And paper-currency, being merely a representative or token of gold, must have a proper gold-basis or else fail.

Modern industrial securities, on the other hand, being issued against the general wealth of the land in the form of industrial appliances, do not need, to equal degree, a gold-basis. When the paper-currency of 1873 was drafted out of its proper function into that now played by industrial securities, it naturally failed.

But when our modern circulating-securities fail it will not be from the same reason. Hence the elaborate provision which has been made, since 1873, against a collapse of the currency or the banks, in the gold-basis and the Federal Reserve banks, will then be of not the slightest avail to prevent disaster. For there is not a clause anywhere in all this to protect the Consumer's dollar against continued dilution by commercialism, which is the modern economic menace.

Up to 1864 a large portion of the paper-currency, then forming the only means for expansion of credit, had been issued by the State banks; and some of these were very shaky in the foundations and questionable as to personnel, through influence by politics as yet unprotected by civil-service reform. Even as late as 1873 there was a much larger volume of paper-currency in use, in proportion to the total volume of trade, than now. Many modern substitutes for bank-notes did not exist at all. Even fractional coins were yet rare. The bulk of all retail-trade was then conducted by means of "shin-plasters"—State or private bank-notes of the value of fifty, thirty-five, twenty-five, fifteen, ten, five and even three cents each—which filled the tills of the shop-keepers by the basketful. And no cash-registers then!

When panic arose all these notes, big and little, became receivable at various discounts below their face-value, or became worthless. Since there were then no telephones nor tickers, these discounts had to be quoted by the banks from day to day, or passed from mouth to mouth. But since, before these shin-plasters had appeared, the people's only reliance for fractional currency had consisted largely of "bits," or sharp-cornered pie-shaped sectors cut from some larger coin, or else of mucilaged postage-stamps—which formed an ideal instrument for making change in a crowded omnibus on a rainy day—the situation was accepted cheerfully, as being not so bad as it had been before.

But in the more recent crises, it need hardly be said, these currency symptoms have been all but wanting. In that of 1893 there was a minor difficulty in securing paper, it is true; but this is quite a different situation from having paper in surplus, with inability to secure gold. In 1893, for instance, the author's business-office had to pay all its salaries with silver dimes, bills being unobtainable.

But by 1907 almost the last vestige of trouble from the currency had disappeared. With the advent of the Federal Reserve

Bank, since then, it is probable that never again shall we suffer from weakness in our currency or in our financial depositaries. But that need not prevent us from having some much greater trouble, from sources which never before have given more than threat.

Historical.—If one attempts to read accepted histories of crises and panics, either in order to collect historical data or to learn the views of the orthodox as to their causes, he is blocked by a complete lack of agreement among such authorities. This is true not only as to theories of cause, but also as to what a crisis or panic may be. There is no standardized criterion by which one may know whether a panic or crisis exists or not. This is probably due to the steady evolution in the nature of each. The subject is far from being a simple one.

Thus, one authority emphasizes the need for distinction between crises and panics, citing historical instances of each without the other. One looks for "tight" money as a sign of panic, another for high prices, another for low prices, and still another for commercial or bank failures. Indeed, it seems indubitable that each must be writing from some quite personal point of view. One is interested in banks, another in manufacture, etc., etc. Some ascribe all American crises to foreign wars.

None, so far as I know, ascribe them to any basic error in the method of our prosperity. They cling to the Prussian trick of regarding ourselves as sinless, blaming someone else for all ills. Their furthest ambition is to criticise either defects in the currency or too great haste in building railroads or other appliances. Yet neither of these can be regarded by the author as, of themselves, the cause of modern panics.

A great many have investigated and emphasized the obvious, though only approximate, *periodicity* of crises; yet without clear helpfulness as to their comprehension or prevention. Periodicity indicates the naturalness of a phenomenon, but it does not aid in its prevention. One writer even carries this to the point of connecting the periodicity of panics with the regularity of the Jewish calender, thus laying the responsibility for all financial crises upon the well-known commercial spirit of the Jewish race!

Nearly all lay stress upon the cheapening of gold as a cause of panic, although gold has, in general, cheapened fairly steadily, whereas panics alternate with prosperity as the swing of a pendulum. Or, when gold has happened to take a sudden jump downwards, as in 1849, it did not create a panic. The next panic did not occur until 1857.

The list is too long for debate. But, as evidence that the explanation of more recent crises is not necessarily that suitable for the earlier ones, the following is quoted from an article in the *Quarterly Journal of Economics* for 1894 by Albert C. Stevens:

> "The year immediately preceding the financial crisis of 1893 did not present symptoms or indications of approaching panic which generalizations from the history of preceding business-crises in the United States had declared should be observable at such a time. A summary in a recent publication ('A Brief History of Panics and their Periodical Occurrence in the United States,' by Clement Juglar) of what have been regarded as essential, underlying conditions of approaching panic, enumerates wonderful prosperity (as indicated by numerous enterprises and schemes), a rise in the prices of commodities, of land and of houses, an active demand for workmen, lower rates of interest, a general taste for speculation ('in order to grow rich at once'), growing luxury leading to excessive expenditures, 'and a very large amount of discount and loans and bank-notes, and very small reserve in specie and legal tender notes, and poor and decreasing deposits.'"

Stevens further quotes Juglar as saying:

> "The fact that an analysis of the bank-returns to the Comptroller of the Currency shows that available resources (capital, deposits, surplus and undivided profits), as compared with demands (loans and discounts), are good and growing . . . justifies the prediction of the steady development of a prosperous period."

This was apparently written, says Stevens, some

> "six or eight months before the crash in industrial securities in May, 1893, with which the panic made its formal appearance in the United States. Evidently, then, the results of elaborate investigation into banking-statistics from 1811 to 1892, covering eight panic-periods . . . must be regarded as not entirely trustworthy indications."

This is the author's point. To those who look upon the spirit of these pages as too radical to be trustworthy, it is urged that, in this matter of panics and their cause, if in no other, *there is no trustworthy orthodoxy.* This entire field of social science regarding unemployment, crises, panics, etc., is wide open to all comers, with the conjectures of each new champion as well accredited by his lack of past record as those of the old-timers stand self-condemned.

Therefore, in getting the statistical measure of the historical evolution of the modern financial crisis, the author is going to leave conclusions largely to the reader. He will not even attempt to define the terms "crisis" and "panic." It seems that there may be a proper distinction between the two; yet it can be of little service here. Here is of interest only the two broad attributes of both crisis and panic, namely, (1) Their root in questions of public credit, and (2) Their fruition in unemployment. What manner of details may intervene between these two extremities of the modern financial organism must be left to specialists for debate.

One feature unquestionably connected with crises, panics and periods of unemployment is that of commercial failures. Table 72 gives the history of these, year by year, for the last six decades, taken from Bradstreet's.

One feature of Table 72 which should not escape notice is the wonderful stability of the proportion of commercial failures to total population, both in number and in amount of pecuniary liability. The average for the six decades is 144 failures per million of population per annum, with an average liability of $2.59 per capita. The maximum variation from these figures is relatively slight and infrequent (aside from the all but disappearance of commercial failures during the Civil War). This showing of Table 72 is conclusive proof, to the mind trained in the natural sciences, that all such social phenomena as these are determined by a mechanical fluid equilibrium which is at base always stable.

The periods of a temporary exaggeration of commercial failure, should these be regarded as criteria of crises or panics, are noted in Table 73.

The influence of the outbreak of the Civil War in the increase in commercial failures is plain; but a far more significant feature is the remarkable dearth of business-failures throughout the period immediately following the outbreak, and continuing until 1873, or even 1876. A sure consequence of every war of recent history has been a period of marked commercial prosperity, arising before the war was completed and continuing with acceleration for several years thereafter. Why the usual panic should arise in Wall Street over every war or rumor of was is beyond the author's comprehension. The prime thing to be done in the face of any such a rumor—if speculation can

TABLE 72

COMMERCIAL FAILURES, 1857 TO 1916

Year	Number per Million Inhabitants	Liabilities per Capita	Year	Number per Million Inhabitants	Liabilities per Capita
1857	170	$10.07	1887	163	$2.66
1858	142	3.21	1888	177	2.05
1859	128	2.10	1889	176	2.41
1860	117	2.54	1890	173	3.01
1861	217	6.45	1891	191	2.95
1862	50	0.70	1892	157	1.74
1863	15	0.23	1893	228	5.18
1864	15	0.25	1894	203	2.53
1865	15	0.50	1895	189	2.49
1866	42	1.50	1896	212	3.19
1867	76	2.65	1897	185	2.13
1868	70	1.71	1898	165	1.77
1869	74	1.98	1899	124	1.21
1870	92	2.28	1900	141	1.81
1871	73	2.14	1901	141	1.46
1872	100	2.97	1902	147	1.48
1873	123	5.44	1903	150	1.93
1874	135	3.59	1904	149	1.76
1875	174	4.53	1905	138	1.23
1876	200	4.19	1906	125	1.40
1877	190	4.08	1907	135	2.27
1878	219	4.90	1908	177	2.51
1879	136	2.00	1909	143	1.71
1880	94	1.31	1910	137	2.19
1881	109	1.58	1911	143	2.04
1882	128	1.92	1912	162	2.13
1883	170	3.20	1913	165	2.80
1884	198	4.09	1914	184	3.61
1885	188	2.20	1915	219	3.00
1886	170	1.98	1916	189	1.89

be guided by past history—is to buy everything in sight which can be held for one or two years. The winnings will be sure and large.

TABLE 73

Maximum Periods of Commercial Failures

(Stated as Percentages above the Average, as taken from Table 72)

Year of Maximum	Number of Failures per Million Inhabitants	Liability per Capita
1857	18	290
1861	50	150
1873	....	111
1875	....	76
1876	39	....
1884	....	58
1893	58	102
1896	47	24
1908	23	....
1914	....	40
1915	52	....

The column of "liabilities per capita" of Table 73 appears as decreasing most markedly during the sixty years. In other words, the element of chance in business-enterprises has been greatly reduced. In the later panics there are as many failures as before in number, but not so much money is involved. The big concerns are becoming more stable. It is the little new ones which keep up the number of failures.

The amount of loss through commercial failures, even in times of panic, has been falling. Amounting to only about ten dollars per person in the panic of 1857, it has fallen to about one-third of that sum in the "silent" panic of 1914.

The statistics as to bank-failures, in Table 74, show a much greater vacillation from year to year than do general commercial failures. They also, as well as commercial failures, show a direct loss per capita which is insignificant, or which would be so if it were distributed evenly over the population. The sort of losses due to bank-failures which are of chief importance are the indirect ones, through disturbance of other business and the discouragement of persons of small means.

TABLE 74

BANK FAILURES

Year	National Banks					National, State, Savings, Private Banks, and Loan and Trust Companies Together	
	Number of Failures per Million Inhabitants	Loss on Assets per 1000 Inhabitants	Year	Number of Failures per Million Inhabitants	Loss on Assets per 1000 Inhabitants	Number of Failures per Million Inhabitants	Liabilities per Thousand Inhabitants
1865	3	$3	1893	97	$223	893	$2540
1866	6	41	1894	31	70	130	200
1867	19	63	1895	52	102	194	330
1868	8	7	1896	38	107	277	800
1869	5	6	1897	53	202	145	290
1870	0	0	1898	9	10	69	220
1871	15	43	1899	16	15	49	330
1872	0	0	1900	8	28	56	110
1873	26	89	1901	14	19	72	210
1874	7	9	1902	3	4	37	80
1875	11	53	1903	15	12	112	420
1876	20	22	1904	24	33	117	270
1877	21	72	1905	26	51	75	290
1878	29	27	1906	9	11	53	270
1879	16	26	1907	8	28	102	2370
1880	6	2	1908	27	66	149	1050
1881	0	0	1909	10	12	44	130
1882	6	62	1910	7	3	48	340
1883	4	11	1911	3	6	65	280
1884	20	52	1912	8	11	50	90
1885	7	31	1913	6	5	82	640
1886	14	5	1914	21	5	131	480
1887	13	71	1915	14	11	84	330
1888	13	35	1916	13	1	40	16
1889	3	3					
1890	14	14					
1891	39	107					
1892	26	81					

The figures as to bank-failures are so erratic as to signify little in their variations from year to year; but they show plainly that the panic of 1893 was the worst ever experienced, so far as bank-failures are concerned. They also afford positive evidence that those who operate the banks either do not know how to run them, or that they are incapable of learning from experience. An average breakage of 16.7 banks per hundred million people per annum, maintained over a period of half a century, and ending in 1914 with a rate of breakage 23 per cent higher than this average, does not look like progress in intelligence, science of finance, or civilized consideration toward others, such as one has a right to expect from American college-bred men. Is it a case of the wrong people in the saddle, or merely a wrong system?[1]

TABLE 75

New York Clearing House, 1854 to 1916

Average Daily Clearings per Capita of Population

1854	$0.72	1870	$2.35	1886	$1.88	1902	$3.10
1855	0.64	1871	2.39	1887	1.93	1903	2.89
1856	0.79	1872	2.69	1888	1.68	1904	2.38
1857	0.93	1873	2.76	1889	1.67	1905	3.61
1858	0.52	1874	1.73	1890	1.95	1906	4.01
1859	0.68	1875	1.85	1891	1.74	1907	3.60
1860	0.75	1876	1.54	1892	1.81	1908	2.72
1861	0.60	1877	1.63	1893	1.70	1909	3.61
1862	0.68	1878	1.54	1894	1.17	1910	3.68
1863	1.44	1879	1.67	1895	1.33	1911	3.25
1864	2.27	1880	2.42	1896	1.36	1912	3.34
1865	2.42	1881	3.10	1897	1.43	1913	3.32
1866	2.62	1882	2.88	1898	1.78	1914	2.99
1867	2.55	1883	2.45	1899	2.53	1915	2.97
1868	2.48	1884	2.01	1900	2.24	1916	4.70
1869	3.21	1885	1.46	1901	3.27		

Another possible indicator of periods of panic or prosperity is to be found in the volume of bank-clearings per capita. Those for New York City are displayed in Table 75. They are subject to the objection that they are expressed in dollars, for the value of the dollar for life-support varies considerably during the sixty-three years covered by the table. Nevertheless, they reveal the major disturbances, namely:

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[1] As a matter of fact, this phenomenon of continual failures of banks is merely our old friend—a deficit in employment—cropping out again in strange form. The current creation of a supply of new banks which are unable to secure business enough to stay alive, or which, succeeding in that, inevitably drive others to the wall, is just as natural a concomitant of the presence of commercial militarism as is a bread-line.

(1) The panic of 1857, the effect of which appeared only by 1858;

(2) The outbreak of the Civil War, before recovery from this panic was complete;

(3) The marked stimulation of trade by the War, beginning in 1863 and culminating only in 1869;

(4) The Panic of 1873, again visible only by 1874, which still left clearings three times as great (in valuation) as did that of 1857;

(5) The culmination of "prosperity" again by 1881, followed by

(6) The protracted recession which lasted until 1898, when

(7) The Spanish War gave matters a fresh impulse which culminated only in 1906. The retraction due to the panic of 1907, while severe, yet contracted the face-value of these clearings only to a minimum which was still five times as great as that of 1857. Finally came

(8) The impulse due to the Great War of 1914, which boosted clearings in 1916 to the highest point shown by the entire table.

Another measure of crises and panics may be found in the receiverships of railroads. Table 76 gives the data as to roads passing into receivers' hands during the fiscal year stated, in proportion to population. It is taken from *Bradstreet's Journal* for Jan. 13, 1917, quoting from the *Railway-Age Gazette.* Here again the figures indicate that the crisis of 1893 was a more severe one than any other. While this may be true for comparisons with crises preceding 1893, for later ones it must be remembered that since 1893 the "industrials" have increasingly shared with the railroads the honor of being a football of speculation, and of enjoying periodic sojourns in the sanitariums maintained by the courts and receivers for the recuperation of their exhausted finances.

In this light, and with particular reference to the date as to miles and valuations involved, the "Silent Panic" of 1914, regarding which so little was said by the writers representing the commercialists, appears as a much more important affair than the panic of 1907, the dramatic aspects of which brought it much more prominently before the public eye.

TABLE 76

Railway Receiverships

In Proportion to Population. 1876 to 1916

Year	Number of Roads per Hundred Million of Population	Miles of Road per Ten Million of Population	Stocks and Bonds Involved, per Capita	Year	Number of Roads per Hundred Million of Population	Miles of Road per Ten Million of Population	Stocks and Bonds Involved, per Capita
1876	92	1464	$10.26	1897	25	212	$1.28
1877	81	779	4.72	1898	24	281	1.88
1878	56	485	1.93	1899	13	136	0.70
1879	24	225	0.80	1900	21	153	1.02
1880	26	176	2.80	1901	5	9	0.02
1881	10	21	0.07	1902	6	35	0.07
1882	23	173	0.74	1903	11	28	0.23
1883	20	369	2.01	1904	10	91	0.44
1884	67	1995	12.94	1905	12	429	2.10
1885	78	1478	6.82	1906	7	24	0.64
1886	22	311	1.22	1907	8	36	0.16
1887	15	177	1.53	1908	27	902	6.72
1888	36	541	3.09	1909	5.5	95	0.86
1889	36	617	1.58	1910	7.6	80	0.56
1890	41	471	1.67	1911	5.3	278	2.25
1891	40	336	1.31	1912	13.6	395	1.90
1892	55	1602	5.45	1913	17.5	926	4.91
1893	111	4382	26.60	1914	22	426	2.01
1894	56	1029	5.80	1915	12	1994	10.59
1895	44	587	5.30	1916	9	432	2.02
1896	48	767	3.88				

Fractional versus Fundamental Crises.—The explanation of this is simple. The panics previous to 1914 were all more or less due to failure in merely a single feature of the commercial system, namely, its credit-currency; and for this either the government or the people might be held responsible. But the crisis of 1914—for one could hardly call it a panic—*was the first instance of a breakdown due solely to the fundamental* *defects of the entire commercial system;* that is to say, due to the expansion of commercial costs against the purchasing-power of the Ultimate Consumer, upon a national scale at once, until the latter broke down simultaneously in all lines of trade. For this reason it is the commercial system alone which might be held responsible for it. Hence the awed silence.[2]

Activity in Wall Street.—Another indicator of crises might lie in the volume of transactions in stock-exchange. But here arises the difficulty that stock is active both during good times and in panics. When times are dull and hard, stocks sell in small volume, it is true; but during panic they often sell off in larger volume, if at lower prices, than during good times. Stocks are often "dull but strong," with small sales at high prices; and sometimes "dull and weak," with small sales at low prices.

Nevertheless, the volume of sales on the New York Stock Exchange is given in Table 77, to show what it may. The statistics most easily available are published in terms of shares, as to stocks, but of par value as to bonds. In order to aggregate stocks with bonds as a single item it has therefore been assumed, in Table 77, that a sale of fifty-dollars' worth of bonds was the equivalent of a sale of one share of stock. Since the bond-sales, roughly speaking, amount to only about one-tenth of those of stocks, with fluctuations in price relatively less marked, this plan will arouse no objection. It is followed merely because sales sometimes run to bonds and sometimes to stocks, so that the records as to either one alone would be misleading.

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[2] The ''Silent Panic'' of 1914 was in reality not a panic at all, but a slowly gathering crisis. There were numerous expressions of commercial confidence on the part of business-organizations published at this time. Yet stocks were far below par, mills and railroads were largely shut down and unemployment was obvious as never before in our history. The New York *Times* for July 24, 1914, a week before war broke out and about five days before anyone in this country dreamed that war would occur, publishes the following:

> ''From figures compiled by Dow, Jones & Co. it appears that there are in default at the present time $551,000,000 of railroad securities in this country, a larger total than has before existed at one time since the panic of 1893. If the prospect of further defaults before the close of this year are realized the total will be increased by at least $72,000,000 more.'' . . . Even the most careless investor is coming to realize that a bond is not necessarily a bond, in his understanding of that word.''

TABLE 77

Stocks and Bonds—Volume of Sales per Capita of Population

(From the *Commercial and Financial Chronicle*)

Year	Shares	Year	Shares	Year	Shares	Year	Shares	Year	Shares
1892	1.43	1897	1.20	1902	2.60	1907	2.36	1912	1.51
1893	1.25	1898	1.78	1903	2.16	1908	2.47	1913	0.96
1894	0.82	1899	2.58	1904	2.52	1909	2.67	1914	0.58
1895	1.10	1900	1.97	1905	3.39	1910	1.92	1915	1.91
1896	0.91	1901	3.67	1906	3.48	1911	1.54	1916	....

As to prices of stocks, those are a much better indicator as to volume of credit and intensity of crisis than any other, in that they are exceedingly sensitive in their fluctuations. The trouble with them lies in the uncertainty as to their outstanding volume, which is changing all the time by issue and retirement.

Since the current volume of issue is balanced at all times against, and is determined solely by, the ability of the public to absorb, therefore, as soon as stocks fall in price, this current rate of issue is checked; and this checks, in turn, the further drop in prices. Conversely, as soon as stocks command high prices all manner of new securities are immediately launched. These help to absorb the buying power and arrest somewhat the further rise in prices.

Indeed, this eventually becomes the sole force available for arresting and reversing the indefinite rise in price of securities. It is literally true that when stocks are booming the engravers and printers of securities become so overworked and pre-engaged, upon the job of flooding the market with such paper, that this limited physical possibility of getting out new certificates itself serves as the limiting control—and the only visible one—of this process of "making money" out of the public.

Thus it must become clear that, however the volume of securities may vary or however the times may be good or bad, stocks will always tend to gravitate in price, through this automatic acceleration or retardation of the rate of issue, *toward a medium* *market-price,* neither high enough to accelerate new issues unduly nor low enough to retard them below the normal rate. The rate of issue will tend to swing first above and then below this normal or average rate; but as it swings on either side it will meet an increasing tendency to return, in as stable equilibrium as a pendulum.

The portion since 1890 of Fig. 1, Chapter V, shows plainly this pendulum-action. The period previous to 1890 was employed in getting up speed of issue, into equilibrium with the rapidly advancing ability of the people to absorb. This ability having once been overtaken, further history must consist of periodic swings above and below this point of equilibrium. In such a situation the only indication as to crises which is afforded by prices of stocks lies in the *rate* of their rise or fall, and the times of reaching maxima or minima of swing.

Reliable information as to these (except at a prohibitive cost for labor of compilation) is available only since 1911, in the index-number published by *The Annalist,* which is based upon the average price of fifty selected stocks—twenty-five railroads and twenty-five industrials. Even in this brief period appears the difficulty of fitting any system of statistics accurately to the constantly changing conditions of economic progress; for, since the number of railroads is virtually stationary (if not actually decreasing through consolidation), while the number of industrials is steadily and rapidly increasing, this fifty-fifty plan for an index-number common to the two, which might have been fair enough in 1911, is already working injustice by its inadequate representation of the industrials. However, the maxima and minima of this index since 1911 are given in Table 78, for what they may be worth.

As showing the way in which the rate of issue of new securities responds to high prices the following is quoted from *Bradstreet's Journal* for July 8, 1916, as to the result of the prolonged high level of stock-prices which prevailed from October, 1915, to November, 1916, interrupted only by a slight lapse (in April, 1916) to the relatively high minimum of index-number 83:

> "Listings of securities at the New York Stock Exchange during the first six months of 1916 reached unprecedented figures. According to the *Wall Street Journal,* the stocks

and bonds admitted to quotation and dealings of that institution in that period aggregated $1,452,444,950 in par value, as compared with listings during the entire year 1915 of $1,179,200,000. The only full year in the history of the Exchange in which the total listings exceeded those just shown for the last six months was 1912, when the securities added to the stock and bond list amounted to $1,816,000,000."

TABLE 78

MAXIMA AND MINIMA IN STOCK PRICES, 1911 TO 1917

Character of Apex	Date	Index Price
Maximum	June, 1911	82
Minimum	September, 1911	73
Maximum	October, 1912	84
Minimum	December, 1914	60
"	February, 1915	60
Maximum	October, 1915	92
Minimum	April, 1916	83
Maximum	November, 1916	100
Minimum [3]	July, 1917	80

[3] Date of closing the table.

The Silent Crisis of 1914.—Table 78 is also eloquent as to the serious character of the crisis of 1914. Although the minimum in stock-prices was not reached until after the opening of the Great War, wherefore it was universally attributed to the war in entirety, yet the striking fact is that *by July first, 1914, at which time not one person in a million anticipated the approach of war, stocks had already fallen to 65.* From October, 1912, long before the Serbian assassination, until July, 1914, occurred a steady decline from the maximum of 84; and this continued, still without appreciable stimulus from rumor of war, until, by the third week in July, 1914, it had touched 60, a low figure probably not exceeded or attained in any earlier crisis.

Just at the close of the month, as the realization of impending war broke upon public consciousness, stocks fell to a point far below 60; but this final collapse through war-panic has been eliminated from Table 78, by confining the record to the true peace-crisis minimum of 60. That is to say, 60 was the minimum actually attained without the aid of war. But how much lower the stagnation of our commercial system might have been carried by its own inherent weakness, had not the war intervened, will never be known. There was no visible sign of its automatic arrest before the war caught it.

That the author is not alone in regarding 1914 as a serious panic-year may be judged from the following, taken from *The Annalist* for January 25, 1915:

> "Both in number and in aggregate liabilities 1914 was the record-year for commercial mortality [failures], and the average liabilities, $19,579,000, has been exceeded only in two or three preceding years—the last time in 1893, when the average was $22,751,000."

But 1914 is to be remembered not merely for its intensity of crisis. Emphasis is laid upon it here because it was the first instance in which the crisis was due purely to a phenomenon which had increasingly entered all earlier panics, and which is fated in the future—now that defects in the currency-system have been eliminated—to be the controlling factor in the destiny of our civilization. This phenomenon is the arrest of industry by *paralysis of public purchasing-power, through prices inflated by the accumulating burden of interest-bearing securities and by the expanding costs of competition.*

The Economic Detonator.—When the economic evolution which has been traced in these pages over the last century shall have continued to its critical point, to the exploding of the most gigantic magazine of pent-up social energy which history has ever recorded—which must surely occur unless reason intervenes with measures sufficiently drastic to prevent—it will be found that the detonator of the charge has been *a final sudden collapse of traffic which had too long been charged all it could bear*—but which had given no striking sign of stress, though sagging slowly, because stimulated and intimidated by an unfounded and barren commercial optimism. But the explosion itself will consist chiefly in a *sudden collapse of world-credit.*

Upon a few days' notice virtually every mill and railroad will have to shut down, not because no one wants its output, nor because no one wishes to work, but because *the business-world has suddenly lost its circulating-medium.* Personal or socialistic anarchy, which of itself can never be a prime mover of revolution, will then be released, by a sudden famine in the midst of our richest cities, into activity and supremacy. Bolshevism will raise its head in congested Manhattan as it has never had basis for rising in sparse Russia, nor even in phlegmatic Germany.[4]

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[4] Should it be thought that this view of the inevitable result of our uncontrollably growing intensity of commercial competition is too pessimistic, due to the too astigmatic vision of a student, perhaps the following expression of the same general opinion, coming from the very heart of commercialistic circles, may be found reassuring. *The Annalist* for June 7, 1915, prints on its outer title-page the following ''scare-head'' in large letters, as calling the reader's attention to the most important thing in the paper:

''A MOVEMENT FOR LESS COMPETITION AND MORE TRADE.''

The article in the body of the text thus indicated says:

> ''No one put it in just that way, but the manufacturers and exporters who appeared before the Federal Trade Commission at their initial hearings in New York in the latter part of last week all had uppermost in their minds the same question. They must have had, for they all took the same mental attitude when they began to make suggestions.''

In this connection Mr. John D. Ryan, president of the Amalgamated Copper Company and head of the National Foreign Trade Council, is reported as saying:

> ''I long ago came to the conclusion that this country, which is the great storehouse of national resources of the world, has since the beginning, practically thrown away its substance. It has robbed itself of its mines, its forests, its soil. It has sold its natural resources in competition with itself, one forest-tract with another, one mine with another, one farm with another, in the severest and bitterest kind of competition anywhere in the world. It seems to me that this is the greatest economic mistake that this country has ever made, and it continues down to this day.''

Yet Mr. Ryan failed to mention the greatest natural treasure of all which America has wantonly wasted, and that is the energy for cooperative interaction between her tens of millions of men and women, now unreleased and ingrowing into bitter disloyalty. Nor did any of these attendants at this meeting (which was in reality one of protest against the folly of the Sherman anti-trust law) place the responsibility for this ''greatest economic mistake'' where it rightfully belongs—on the professional economists of our universities, who have always had at hand in their libraries ample statistics to prove the folly of commercial competition, yet who have never appeared before the public in a united and courageous condemnation of the anti-trust movement, if nothing more.

But the point of detonation of our swelling magazine of pent-up social energy has not yet been reached. Actual history switched off, in August, 1914, from further economic evolution to a much needed readjustment of our foreign political relations. All the domestic forces of social progress and reaction were temporarily submerged in the importance of the titanic struggle across the Atlantic. The stock-exchanges were closed for six months, and by the time that they had re-opened the tremendous governmental issues of credit abroad, based upon patriotism, had already begun to exert their vivifying effect, through huge purchases of goods here for export.

So stocks refused to sell off below the figures of July, 1914, and rose rapidly instead to 93 by October, 1915. Then they fell slowly to 83 in July, 1916, and rose rapidly again to 100 in November, 1916.

After that date they fell slowly, under the effect of voluminous issues of new credit-instruments incidental in the supply of munitions, and under the depressing effect of the approach of the United States to actual war, until mid-November of 1917, when they reached a minimum, slightly above 80.

This figure may confidently be expected to be a minimum, for inevitably the quite unprecedented rate of issue of governmental war-credits inaugurated by our actual entrance into the war, amounting to seven billions for the first single item, with others of similar magnitude to follow, must soon have its effect in such a stimulation of commercialism that *the resultant period of prosperity to follow must far outshadow any puny expansions of the past,* based upon such petty wars as the Franco-Prussian, the American Civil and the Spanish-Cuban. So far as history has become available, up to the closing of these pages, this expectation has been fully realized.

CHAPTER XXII

MISCELLANY

THE foregoing comprises all of the factors essential to forming a complete working-structure of modern dynamic society. Working from this as a basis, all social problems of the day may be understood.

But it is still necessary, nevertheless, in order to complete the statement of modern economic tendencies in terms of the ideas now prevalent with the man-in-the-street, to review some social topics which are not themselves essential nor basic in character, but which are commonly regarded as being such. Of these the first is

Capital and Labor

The idea that we are approaching some sort of a severe economic crisis cannot be suggested to the average person, even if technically educated in social science, without his replying: "Ah, yes. Capital and labor." Yet, as a matter of fact, and as must be plain from all that has preceded herein, *neither with the crisis itself, nor with the method of its approach, has the contest between capital and labor anything appreciable to do.*

For this contest has now prevailed continuously for centuries —certainly ever since the medieval trades-guilds arose as an answer to the pressure exerted upon the free cities and burghers by their political lords, elevating Gog and Magog to their majestic thrones. During the four or five centuries since then the situation has been one of continuous deadlock. The current result has been merely to adjust wages here and there, up or down, in keeping with the rising or falling cost of living; and this is still the sole function of all strikes, lock-outs, etc.

But nothing basic nor final has been settled. The situation is substantially what it was four centuries ago.

Obviously all this past friction between capital and labor cannot have accomplished anything toward the permanent betterment of labor, nor toward a permanent solution of the economic problem, else we should not now have an acute social problem, which is plainly approaching the critical stage, rather than approaching solution. Instead, we should have observed a gradual amelioration of poverty, and the evaporation of the economic topic from our public debate.

Nor, from the point of view of those who believe in the betterment of labor by the elevation of wages, through pressure upon the employer to grant more pay, can anything have been accomplished in that line by all this strife, unless the endless struggle between labor and capital can be seen to have *relatively impoverished the employer and enriched labor.*

Yet it is because exactly the opposite from this is broadly true that we are now devoting more attention to economic problems than ever before in human history. While wages have risen recently at a rate exceeding the fondest dreams of the agitator of a generation ago, agitation is still more active to-day than ever before, because it is obvious that labor is not winning. However labor may be enjoying higher wages, it is unquestionable that *the wealth of the employing-class has increased far, far faster still,* while the purchasing-power of the wage has fallen relatively to productivity.

But it is not the purpose here to debate the efforts of organized labor from the point of view of class-consciousness, in order to ascertain which class has won the more wealth, nor by exactly what degree. It is our prime purpose, indeed, to throw all such futile debate into the background, by emphasizing the larger interests of all citizens in the problem viewed as a whole. For this purpose it is sufficient to note that *no principle of right or wrong has ever been involved—and hence never could have been settled—by all this bitter struggle between labor and capital. Hence there can be no ultimate victory for either side.*

The whole history of capital and labor corroborates this view. *Centuries of struggle between the two have not yet evolved for the good of future generations a single resultant basic principle of wages. Not a clause has been incorporated in our constitutional law as perpetuating the undying rights of either labor or capital. Not a single standard has been planted where it will stay.*

For generations such expression as "a fair wage" or "the laborer is worthy of his hire" have been bandied about in vain. The struggle remains now the petty, sordid one it was in the first place: To see which side can get the most money—with the result that the relative division between the two seems to be substantially that which it has been throughout the last five centuries.

What was considered a fair wage, as to figure, fifty years ago, would make a walking-delegate weep to-day. What is considered a usual wage to-day would have bankrupted every employer in the prosperous times succeeding the Civil War. But the relative purchasing-power of the two wage-figures has not changed in any like degree.

There is no disposition here to minimize or deride labor's sore need for relief. It is fully recognized that many wage-earners are suffering a hardship far more drastic than too little sugar in their coffee. The point is that the strife for higher wages *does not even touch,* let alone ameliorate, these drastic hardships. It only increases them, by raising prices which wage-earners must pay.

Even if the wage-earners could succeed in elevating wages to thrice what they are now, they would be only worse off than now; for prices would then be five or six times as high as now, and the deficit in employment be far worse than now. The pressure upon them then to take a beggar's crust, or leave it, would be heavier still than now.

It is unquestionably true that the organization of labor for this endless struggle with capitalism has accomplished some incidental results of value to those organized, in improved hours and conditions of labor. But so far as distribution of wealth is concerned it has accomplished nothing, except to make organized labor slightly poorer in purchasing-power, and unorganized labor very much so.

Moreover, even in this the labor-unions have served rather as mediums for expression and communication than as instruments of penetration toward any definite goal. As all the conditions of life for the well-to-do have been ameliorated by inventive progress, as the volume of printed matter issued has increased by leaps and bounds, and as opportunities for amusement, recreation, education and travel have broadened, the conditions surrounding labor in the larger factories have been improved in some respects. But this improvement has come entirely through the action of ethical forces. So far as labor's fight against capital for better wages is concerned, labor's condition has become steadily worse, relatively speaking.

Moreover, the improvement in labor's conditions of work must be viewed against a proper perspective. Things have been bettered, usually, only as they became so outrageously worse than what the rest of society was enjoying that the factory-administration became ashamed.

Thus, one of our large factories best known for its remarkable welfare-work has an arrangement whereby any girl in the place may leave her work in the afternoon, by trolley, for a comfortable country-club maintained by the factory. There she may secure a night's lodging for a nickel, enjoy the fresh air and quiet, or engage in tennis, golf or a barn-dance in the evening (the men's club being less than a mile away), and then trolley back in the morning at the cost of a third nickel!

How wonderful are modern opportunities! How philanthropic are modern employers!

Yet, upon stopping to think of it, this girl has thus had presented to her by her employer (at the expense of the Consumer, who is paying for what this factory puts forth several times its natural price, and with a rate of pay going to the employer for which any scientist or biologist or physician would be glad to devote his every hour to aiding human life) *only what her grandmother enjoyed nearly every night of her life, at home—fresh air, quiet and country-fun,* such as her day afforded to anyone!

Yet, under commercialism, this factory-girl is in unusual luck. Fewer and fewer working-people can enjoy such privileges. The factory-managers and settlement-workers may strive as they will, yet commercial forces, which are vastly more powerful than they, are shutting ten people off from natural life, by congesting them in cities more densely, by increasing unemployment and by rising prices, while one is being rescued by welfare-work. The whole of our vaunted progress in welfare-work consists merely in getting back for the slaves to modern commercialism, and presenting to them as a humiliating gift, some small fraction of those natural enjoyments of which we deprived them when we pinned our faith to ownership-in-

industry as the guiding policy in economics, and to profits as the emolument with a halo.

TABLE 79

GROWTH OF STRIKES AND LOCK-OUTS, 1881 TO 1905

Year	Strikes per Million of Population	Lock-outs per Million of Population	Average Strikers per Strike	Strikers per Thousand of Population	Employees Idle from Both Causes per 1000 of Population
1881	9.2	0.12	215	1.96	2.53
1882	8.6	....	266	2.29	....
1883	8.8	....	255	2.26	....
1884	8.0	....	265	2.12	....
1885	11.4	0.88	246	2.81	4.56
1886	24.7	2.42	284	7.04	....
1887	24.3	....	190	4.62	....
1888	15.0	....	114	1.71	....
1889	17.4	....	191	3.32	....
1890	29.1	1.02	156	4.53	5.93
1891	26.7	....	143	3.81	....
1892	19.8	....	126	2.50	....
1893	19.5	....	149	2.91	....
1894	19.7	....	374	7.40	1.01
1895	17.4	0.57	235	4.11	5.84
1896	14.5	....	179	2.59	....
1897	14.9	....	309	4.60	....
1898	14.3	0.57	172	2.47	....
1899	24.0	....	172	4.11	....
1900	23.3	0.79	225	5.24	7.44
1901	37.6	1.03	136	5.10	7.25
1902	40.0	0.98	175	6.98	8.73
1903	43.3	1.91	152	6.60	9.77
1904	28.1	1.36	163	4.58	6.99
1905	24.8	1.30	85	2.10	3.60

Statistical.—Statistics as to the struggle between labor and its employers throw little light upon the situation, except to indicate in general its unchangeableness. What data of a national sort are available are set forth in Table 79. They extend only down to the year 1905, but they exhibit clearly these following tendencies:

(1) The number of strikes per capita (second column) is fairly steadily upon the increase.

(2) The average size of strike (fourth column) is as steadily upon the decrease.

(3) The average number of strikers per unit of population (fifth column) consequently remains substantially constant.

In these respects these figures corroborate our conclusions from quite independent sources of information, namely, that the number of establishments for the employment of labor was increasing, in proportion to the population, indicating a decentralization of industry; yet that the contentiousness between the men and these employers tended to remain constant.

In the final explosion toward which all this reckless accumulation of social instability appears to be leading us, undoubtedly the various organizations of labor will play an important part, *after the explosion has been detonated by some other factor.* But that part will be a secondary side-issue, not a controlling function. It will be a destructive, not a constructive policy. It will be a disappearing-villain's rôle, and not a curtain-hero's fate.

When the revolution has been completed the battle will have proven not to be one in which the prime contending parties were capitalism versus labor, but the great mass of *now unorganized Ultimate Consumers* on the one hand, prevailing ultimately, through whatever instrumentalities they may be able to lay their hands on, against the huge inefficient anarchy of commercialism, as displayed by competing corporations, corner-groceries, labor-unions and political parties, on the other. It will be society as a whole against a horde of its own discordant parts.

In the present approach towards this crisis, as in its final outcome, these following facts will prove of aid in guiding one's thoughts, even if the facts be negative ones. The positive ones will be found in the next chapter.

(1) *The struggle will not be over wages, but over food and employment; nor will it result in any settlement upon a higher wage than now (except as the general scale of both wages and prices will continue to rise, as now), nor upon any fixed wage at all, nor upon any permanent principle of adjusting wages*—except as the definition of the natural, competitive wage, as defined herein, might be regarded as a principle. After the

smoke of conflict has drifted away and poise has been regained, wages will be determined as now—by a separate bargain with each workman—whenever any bargain at all is necessary.

For when the employer has ceased to be an owning and profit-seeking employer, becoming merely a fellow wage-earner, *who distributes wages in a market in which there is no deficit in employment, and no dilution of the purchasing-power of the dollar,* all discontent over wages will have ceased. In any given line of work wages will then be as stable and unquestioned as is now the price of postage-stamps.

The working-classes, in those efforts towards self-betterment which we hope and believe will never cease, will then never think of the wage-question as an opportunity for profitable strife, any more than the employer will then ever regard prices in that light. They will then never strike for higher wages, because every man will then appreciate instinctively what he should realize now, namely, that *every increase in wages comes not from the employer, but from other wage-earners, in the form of higher prices.*

Every workingman should realize to-day that every strike is directed, not against the employer-class—which has thriven and grown tremendously rich upon decades of strikes and rising wages—but against the wage-earners in other trades, who are the ones who pay all wages and who, upon these same decades of strikes and rising wages, have grown steadily poorer and poorer. *There is no scab to equal a striker.* For he is robbing his fellow-workingmen not only of the volume of employment which they otherwise might enjoy, but also of the money which they have earned in the past, by raising the prices which they must pay.

(2) The crisis will *not* be precipitated by the wage-earners themselves, organized or unorganized, acting either by "general strike" or as a mob. *After it has been precipitated by other causes, lying within the commercial system itself,* then both sorts of labor—organized and unorganized—will take an active part (if past history is to be any guide) in tearing the structure of the commercial system into such debris that no one will ever again be sufficiently reckless to recommend its reconstruction.

Organized labor will do this through frightful tyranny, deliberately planned. Unorganized labor will accomplish the same end subconsciously, through hideous mob-violence. But neither of these social forces will possess any slightest creative power for the erection of permanent new institutions. Nor can these institutions be erected by any other social forces, until the contentiousness of wage-hungry labor shall have finally exhausted itself in an extremity of anarchy which will have destroyed the upper classes by the thousands, and labor itself by the tens of millions, of lives.

For it is only the people as a whole which can create institutions for its own permanent protection. If a minority acts, as a dictator, it must act in the name of all, in order to succeed.

(3) The final result of the revolutionary cataclysm will be to blast away forever the ancient feud between organized labor and organized capitalism—not by molding the dispute into a further endless compromise between the two, nor by permanent victory for either side; but by casting the whole question forever into oblivion, leaving on the field of present battle merely a memory of past conflict—just as the skeletons of two stags who died of starvation, with antlers inextricably interlocked, remain as a monument to their fruitless, suicidal enmity and strife.

A more constructive picture of how all this is to come about, in outline at least, will be given in the succeeding chapters of this book. In the meantime our examination of current economic delusions must be continued.

The Minimum Wage

From this same viewpoint the hopes of the advocates of the minimum wage, as a key to unlock our economic problems, or even as a means for their partial amelioration, may be quickly put one side. For the minimum wage is not at all a novel institution, to be expected only as the result of legislation in the future. *There has always been a minimum wage,* established and maintained by a law superior (so long as commercialism survives) to every human statute and constitution.

That minimum wage is zero. So long as every employer is left free to hire or discharge labor at will—and to deny this freedom, under commercialism, would amount to a confiscation of property upon an overwhelming scale—just so long the minimum wage prevailing in any and every class of labor, *no* *matter what may be on the statute-book,* will be just nothing at all per week!

Indeed, the reader who followed the chapter upon Unemployment need not be told that, in every walk of life dependent upon exertion for an income, this minimum wage now actually prevails at all times, over a proportion of the population therein which is predetermined by a natural law rigidly based upon the economic conditions prevailing at the time. This law neither workingman nor employer nor legislator is competent to disregard, annul or reverse.

This being so, it would seem that the agitation for a legally minimum wage, which has just now been dropped among the greater interests of the war, would best never be renewed. Even as an expression of public opinion it can never have more than microscopic value—nothing in comparison with its cost in debate necessary to settle upon the figures which may be regarded as a fair minimum, in each of the many diverse conditions of labor, and then to readjust those figures every few months into consonance with the rapidly varying cost of living—while the legal precedent established would be mischievous in the extreme. As a source of endless quibble the task would be more complex and hopeless than the tariff—regarding which God grant that there may never be another public debate!

Automatic Involuntariness again.—For it is not such a simple question as that of possibly influencing by public pressure some employer or other into paying higher wages. It is a question as to what good it will do the workman when done. For the relation between wages and their purchasing-power, and hence the real wage, has not been left to the whim of the individual employer. *It is beyond the ability of either employer or laborer to affect this real wage.*

The futility of labor's trying to better its condition by raising wages, by strikes, has already been pointed out. *It is equally futile to have them raised either by the voluntary act of the employer, or through his coercion into doing so by law.*

The trouble is not that wages cannot be raised. That is more than easy; for, under commercialism, wages insist upon rising steadily without anyone's help—always carrying up prices more rapidly than themselves. The trouble is that *a rise in wages always means a decrease in their purchasing-power.* The effective wage falls as the figure on the pay-envelope rises. This law applies as relentlessly to the "minimum wage" as to any other.

For instance, the report of a recent federal commission of labor mentions the gain in wages secured by a certain large coal-mine strike as being $4,500,000. But the increase in price of coal to its Ultimate Consumers, due to the same cause, was $13,000,000! Who paid the $8,500,000 of difference, lost by the public each year?

The workingmen of the country and their families! They paid it not only in the increased cost of heating their homes, but in increased cost of food, clothing, shelter, transportation, amusement and everything else into which the cost of fuel enters as a factor.

Thus, while all the other trades of the land were thus paying the coal-miners their increased wages (through the mine-owners as agents, with a commission of $1.88 paid to said agents in addition to every dollar passed through to the miners), these same coal-miners were paying, in the price paid for clothing and other things (and upon the same efficient plan for the transfer of the money) the increased wages for textile operatives won by the Lawrence (Mass.) strike, and by the copper-miners in northern Michigan and Arizona and every other increase in wage in every line of labor anywhere in the land.

Even if the employers had consented to handle all these useless cross-payments of wage-increase for nothing, the net result to the workingman, as a class, must have been exactly zero gain—each man paying just a dollar more across the shop-counter for each additional dollar of wages received. But in actual fact people do not transact business in this ideal way. Moneys are not handled without charge therefor. So, after all these cross-payments have been completed, statistics show that labor has gotten back to itself, in the form of higher wages, scarcely more than one-third of what it put in in the form of higher prices!

Part of the other two-thirds has been lost in transit. The remainder goes to enrich the employer-class. *The obvious result of two generations of rising wages, sometimes raised voluntarily but usually forced up by unions and strikes, has been the palpable growth of discontent amongst the wage-earners, if not* *their actual impoverishment, with an astounding rate of enrichment of its employers.* Yet the only key needed for unlocking this paradox is attention to rising prices.

It is from this basis that the question of the minimum wage must be viewed—even if we discount, for the moment, what was said as to the zero wage. Suppose that in a certain line of work where men had been receiving $3 per day the law enacts a minimum wage of $4. What, in all common sense, must be the result?

When the men apply for their jobs they will inevitably be told one of three things, namely:

(1) That the job is not worth $4, and that arrangements are therefore being made to do it by machine—for the margin of $1 would immediately induce engineers to design, and employers to install, machines which could not be afforded in competition with three-dollar labor; or

(2) That the work had been abandoned altogether, as unprofitable; or

(3) That all employers in this line of work had agreed to accept the law, to raise the wage to $4, and to *elevate the price of output sufficiently to cover the increased cost, with a profit on it added.*

In the first or second of these cases the workman who before was discontented only because of a fractional deficit in his proper income *now loses the whole of it.* Thereupon he enters upon that career of degradation which is inseparable from unemployment, into the laziness of the tramp, the bitterness of the anarchist or the vindictive hypocrisy of the criminal.

In the third case the time is short until prices in general have advanced—for the minimum wage, to be worth anything, must apply to all trades—sufficiently so that the *$4 buys not merely no more than the $3 did previously, but even less than that.* In the actual history of America during the last two generations, actual progress has been divided between these three processes fairly evenly.

Thus the enactment of a statutory minimum wage is a decree which is powerless to increase the purchasing-power of any workingman, shop-girl, etc., more than momentarily; it is sure to reduce that purchasing-power ultimately below what it was before the decree; and meanwhile it sets going another of our many futile distractions of public attention away from the real issues of the day, to the waste of invaluable time in unending discussions of unsolvable problems, like the tariff.

For the whole problem of the economic reformer, it must be plain from all which has preceded, consists in the maintenance of a proper and effective *rate* of reform. To stand still, or even to proceed slowly, is fatal. To lose time in the face of the rapidly gathering crisis which now impends, is as reprehensible as the dawdling of a military commander in active campaign in the face of an approaching enemy. Every hour is precious. For there is no line of human progress which is advancing with anything like the energy, speed and *acceleration* with which commercialism is now constantly expanding.

As one of our most obvious instances of not merely the rate at which the fruits of commercialism are ripening before our eyes, but of that relentless incorrigibility which all these phenomena manifest, let us turn to that most deadly and demoralizing of all the many tragic features of commercialism which grace what we are pleased to term our peaceful evolution of civilization, namely,

Congestion in Cities.

The statistical aspect of the growth of cities as a whole has already been presented earlier in this work (pages 362-365). The very interesting topic of the degree and rate of congestion of population within certain districts within the cities, called slums, may not be embarked upon here. The present task is merely to trace economic causes of modern tendencies; and slums are effects, not causes.

But one of the prime causes of urban congestion, according to an all but universal belief which asserts itself whenever discomfort from congestion has happened to make itself noticed, is the lack of more subway, elevated or trolley cars or roads. Therefore we must inquire if this belief be well founded.

Has urban congestion ever been remedied in the past by the extension of transit-facilities? If not, it is obvious folly to hope for remedy in the future in this direction.

On May 26, 1907, the New York *Herald* published a symposium of views upon this matter by Mr. Theodore P. Shonts, president of the Interborough and official of other transit-corporations, Mr. George S. Rice, then Chief Engineer of the

Rapid Transit Commission, and the author. In the author's contribution was included a brief abstract of the history of New York's rapid-transit facilities. The symposium was reviewed and abstracted in an article upon "Congestion in Cities" appearing in *The Geographical Review* for April, 1917, from which a portion is quoted below through the courtesy of the American Geographical Society.

The earliest steps toward providing New York with urban transit are of interest as having been inaugurated during the decade preceding the census of 1850, which has been selected as the starting-point for the statistical analyses of this work. They consisted of the now obsolete horse-drawn street-car, and included the Harlem road—which still survives, partly in the tunnel under Murray Hill on Fourth Avenue and partly in the splendid four-track line by which the New York Central and New Haven trains gain access to the Grand Central Station. But there was even then frequent complaint of insufficient service, and the papers of those days were filled with many a quip and cartoon ridiculing the city's discomfort in struggling up and down town by means of horse-cars and omnibuses—at their best, in fine weather, slow and noisy; in wet weather most disagreeable, and in deep snow either stationary or nonexistent.

To quote from the article of 1907:

> "During the sixties the pressure for something better than the street-car became more urgent; but . . . it was not until 1869 that the first elevated construction was undertaken. This first effort was limited to a half-mile of experimental track put up on Greenwich street; but its apparent success led to its further growth into a genuine road, extending from Battery Place to Thirtieth street, the embryo of the present Ninth-avenue line. But the motive power was by cable, from stationary engines, and was mechanically a failure. By 1871 it had been virtually abandoned as a promise of relief. The state of public opinion existing at this time is shown by the following editorial remarks appearing in the *Railroad Gazette* for February, 1872:
>
> "'That the city of New York is sorely in need of greater facilities for transporting its people to and fro is a fact which is painfully impressed upon all. . . . Every person

> who discusses the question is fully satisfied that something must be done.'
>
> "This editorial might have been written just as opportunely in 1892 or 1902 as in 1872. It expresses almost exactly the situation in New York city to-day, although the transit-facilities now extend almost to millions where thirty-five years ago they compassed thousands."

It might be added to-day, in 1917, that this editorial is just as timely now, ten years later (during which decade the transit-facilities have increased fifty per cent), as it was in 1907. And it would have been equally timely in 1852 or 1862.

> "During 1872 the old elevated property was purchased by a new organization and was equipped with locomotives, constituting the first really successful elevated rapid transit. The traffic of this road during the succeeding five years, within which time the line was extended to Sixty-first street, increased as follows:

TABLE 80

Growth of Elevated Traffic, 1873 to 1877

Year	Passengers	Increase (per cent per annum)
1873	640,000	..
1874	810,000	27
1875	910,000	12
1876	2,020,000	122
1877	3,150,000	56

> "These figures show how naturally it should come to pass that the situation by 1877 had again become badly congested. In May of that year the same editorials say:
>
> " 'The elevated road has now all the traffic it can accomodate, or rather a little more. Many have to stand in the cars morning and evening, and no more trains can be put on.'
>
> "On November 16, 1877, the *Railroad Gazette* remarks:
>
> " 'Where so recently there was no means of traveling from Wall Street to Central Park faster than horses could travel

there seems likely to be in a few months three steam railroads, all within a belt a mile wide. The question then will no longer be how people can get up and down in the city, but how the three railroads can get traffic enough to support them.'

"Oh, halcyon dream! Within less than seven months from that date the Sixth Avenue line was opened, and this is the result of the first day's 'relief' of congestion, as commented on in the same columns:

"'Most notable of all, perhaps, was the amount of traffic, the trains appearing to be generally filled at some point of their run, and that not only in the morning and evening, but also in the middle of the day. Indeed, about noon many were standing in the cars.'

"Already in 1881 trains were running during rush-hours under a headway of 82 seconds over a single track, and almost all of the additional facilities provided during succeeding years were in the form of longer trains. Referring to the prospect of this lengthening of the train, in October, 1885, the *Gazette* remarks:

"'A large number of passengers who now have to stand up for a considerable distance will then be able to obtain the seat for which they have paid.'

"Oh, halycon dream again. For in October, 1887, only two years later, the same sheet feels forced to remark:

"'The chronic overcrowding of the elevated railroads of New York has lately called forth some indignant protests from the daily press.'

"That was the situation twenty years ago. That is virtually the situation to-day, except that it has become steadily worse. During these twenty years transit-facilities have increased by several fold—certainly by over ten per cent per annum—although the population has increased by only . . . about four per cent per annum. During the twenty years the congestion has decreased not one iota. Instead, it has increased. . . . In the light of history, what is the use of expecting relief from expanded facilities?"

The above is certainly a strange record of alternating and inconsistent pessimism and optimism. Certainly by a generation ago it must have become plain that expansion of transit-facilities was not relieving congestion. Yet intelligent, college-bred men kept on believing that it would do so! Whence they derived their faith it is impossible to surmise!

Nor is the *Railway Gazette* quoted here to serve as a butt for derision, but rather to show how the ablest sources of public opinion find themselves deceived upon economic questions and unguided by their college-education; for this journal has ever stood as a leading one in its profession. Nor can it receive the blame alone, for Mr. Shonts, who stands before the public as the highest person in authority over its transit-system, after taking the care to review briefly the statistical history of the traffic, can find nothing more perspicacious to offer as a conclusion, in this symposium of 1907, than the following:

> "It would therefore appear that the solution of this problem must lie in the creation of additional rapid-transit lines of travel."

To which opinion, since Mr. Shonts has a considerable personal interest in promoting the possible volume of traffic, the public will add a grain of salt before taking.

At the same time Chief Engineer Rice committed himself still more unequivocally as follows:

> "The rapid-transit problem in New York can be solved. There is nothing in the situation to justify the prophecy that New York must always suffer, or long continue to suffer, inconvenience in its traffic-facilities."

Yet he himself adds later a paragraph which is italicized here only because the editor of the *Herald* italicized it, in entirety, as expressing the gist of the whole symposium, as follows:

> *"It is one of the paradoxes of our work that as we increase the facilities of transportation we add to its volume in a surprising ratio. In a sense we are therefore working in a circle. As quickly as it becomes possible to ride about the city at an increased rate of speed, and with the opening up of new lines of transit, business increases, population is attracted to the city, and the problem is vastly complicated."*

If this broad fact does not "justify the prophecy that New York must always suffer inconvenience in its traffic-facilities," it is hard to say what conclusion it does enforce! The situation to-day, ten years after this was written, is certainly far worse. The way in which human beings allow themselves to be handled like cattle in the present subway-trains will surpass the understanding of polite people of 1950.

Nor is this due merely to the fact that additional subways are all but completed, soon to relieve the situation—as Mr. Shonts is now urging the people to believe, in notices posted in his cars. The crowding was just as beastlike several years ago as now. It has been at all times as bad as civilization could endure. It has stood as a denial of the fact that we were civilized.

During these recent years the subway trains have been lengthened from seven to ten coaches each, while the elevated lines have been given a third track, carrying express-trains downtown in the morning and uptown in the afternoon. Yet there has been no relief. The prospect which Mr. Shonts holds out to the public that the opening of the new subways, upon which the city is spending six times the cost of the present system, will soon relieve the crush, is the same old halcyon dream which has been wafted from the pipe-smoke of the transit-owners ever since the days of the Mexican War. In the light of these facts, with which these transit-owners must be more conversant than anyone else, it is impossible to have faith in the sincerity of these utterly unfounded representations.

Indeed, the figures as to the growth of the city's transit-facilities, as set forth in a sheet issued by the Interborough Rapid Transit Company itself, under date of December 20, 1916, are given in Table 81. The situation which we are emphasizing here is admitted in the very title of the sheet, which reads: "How New York Overtakes its New Transit-Facilities."

On July 30 of that same year the New York *Times* quotes, as from an official utterance of the Interborough Rapid Transit Company, with its own headlines, the following:

"New York's Crowds Swamp All Transit
Interborough Says No Growth of Facilities Can Keep Pace with City's Demands. No Relief in Third Tracks
Elevated Traffic Back to Maximum within a Month,
While Subway Jam Increases Steadily

> No matter how fast rapid-transit lines are built in New York City, the transportation needs of the population always seem to keep ahead of them."

And on October 22 of the same year the same journal prints the facts again, this time presenting them in graphical form, putting the rides per capita per annum as 356 and the cost of carfare to each inhabitant, on the average, as $17.46 per annum.

TABLE 81

GROWTH OF NEW YORK'S TRANSIT FACILITIES, 1872 TO 1916

Year	State of Development of the Transit Facilities	Total Rides (Millions)	Rides per Capita per Annum
1872	Horse-cars only....................	139	147
1872	First year of Elevated with Locomotives (3d, 6th and 9th avenue lines only)	251	215
1906	First year of Subway...............	837	298
1916	First year of 3d track on the Elevated lines............................	1201	332

In the autumn of 1917 the posters in the subway itself announced that the Interborough traffic is now over two millions of passengers daily, with an average increase, as compared with only a year ago, of over two hundred thousand passengers daily —an annual increase of ten per cent! Yet the city is now growing at an average rate of only about four per cent per annum. If the growth in demand for transit is not running rapidly and acceleratingly away from both population and transit-facilities, it is difficult to say what it is which is happening.

The simple truth as to all this is so simple, in the light of all which has preceded, that it needs be mentioned only tersely. The principle underlying all congestion of transit-facilities is that *it is commercialism which creates congestion; transit-facilities merely permit it.* Therefore, the more transit-facilities we may build the more congestion, and not the less, we shall be sure to experience.

Instead of its being true, as Mr. Rice says, "there is nothing in the situation to justify the prophecy that New York must always suffer, or long continue to suffer, inconvenience in its transit-facilities," the handwriting is plain upon the wall that the congestion of our great cities promises soon to form one of the pivots of a gigantic crisis. Although this crisis will doubtless be brought to a head by other factors, yet, when once here, its most tragic aspect will center about the utter inability of a population still greater than now, cooped up on a rocky islet, to get food in, or to get itself, its garbage and its dead horses out, when all the facilities for transportation have ceased operation, from their reliance upon a collapsed circulating-medium of inflated private credit.

Looking over the platforms upon which have been staged the most tragic features of revolutions in past history, this transit-situation looks as much like the one which the present generation is building for itself as any. The recklessness with which man has stored huge magazines of highly explosive chemicals, in his preparation for war, is as nothing compared with the recklessness with which populations adequate for stocking an entire nation, a generation or so ago, are now being compressed within limits unfit for supporting one-tenth their numbers.

The Automobile.—In this staging of the coming crisis by the increasingly acute congestion of our cities, the automobile is playing a part only secondary to our rail-borne transit-systems. Yet the congestive function of the automobile is exerted in a manner quite different from that of the rail. The rail-systems make greater and greater degrees of congestion barely tolerable for the poor. The automobile makes them ever increasingly pleasant for the rich.

That is to say, as congestion increases it augments for the well-to-do the pleasant contrast between home and office, while it does not for the poor. The rich no longer seek residences within transit-distance of their offices, but settle, instead, upon country-estates forty miles out. At the same time, the increasing congestion increases the profitability of the downtown office. At both ends the rich gain.

But not so the poor. They bear increasingly the burden of a congestion against which even the rich would revolt, were the latter not relieved by the automobile. Thus the degree of congestion tolerable, upon the average, has been increased by the automobile; yet of this growing burden the poor have borne an increasing fraction, as the automobile has become more powerful and reliable.

In this way the automobile has exerted a powerful influence in magnifying the contrast between rich and poor. It is not merely the visible contrast in comfort between him who rides and him who walks, but the contrast between one who finds life tolerable at all only because he can ride, and him who, because he cannot ride, finds life all but impossible. Those who see in the sentiments of the poor toward the automobile only malicious envy, have far failed to grasp all the forces at work.

Social Candor.—These being the facts, why cannot we have them recognized with a little frankness and sincerity by those who control our transit-systems? Or, if we may not look to these for anything public-spirited or broad-minded, then why not by our city-officials? Are they too shackled by commercialism? Or, if not there, *then why not by our teachers of political economy?* Does the paralyzing poison of commercialism penetrate even our universities?

What is the matter with us? Why, in the language of one of New York's most prominent divines, must educated society sit paralyzed, in the face of this approaching crisis, like a bird fascinated by a snake? Why have not those who have assumed all too lightly the very grave responsibility of guiding public opinion, and especially that of teaching young people their concepts of citizenship, long ago taught plainly and emphatically that the line of progress now being followed, in the accelerative growth of every feature of commercialism (of which this congestion in cities is merely one) leads straight towards cataclysm? There is sharp and heavy blame lying somewhere.

Incomes

Another topic favorite with the man-in-the-street who is inclined to be radical is that of swollen incomes. His attention is caught by the great size of some incomes, and he judges from that their inequity. He often believes that incomes should be limited by law. The legislators on both sides of the Atlantic have embodied this belief in the enactment of income-taxes which are yearly becoming more drastic.

But this is the same mistake, made in another direction, as that of the socialist, who deems wages inequitable merely because they are small. The legislator, who is usually most supercilious toward the socialist, is just as superficial as he, and more so, when it comes to political economy.

While it is true that it is disparity of wealth which is the source of discontent, and while it is true that our larger current incomes are inflated to the point of absurdity, yet this does not mean that disparity of income is necessarily inequitable. *It is only when this disparity exceeds that of the individual productive capacity that inequity arises.*

That is to say, in the golden age of pure economic justice yet to come, incomes will not be leveled into equality. As men differ in productive capacity their incomes may, and should be, proportioned thereto, without inequity.

But human beings do not differ by any means so widely as do modern incomes. As one compares man with man one is struck not so much with the injustice, as with the absurdity of our present gigantic incomes. They make such a laughable matter of any pretense that they represent truly the differences between man and man, in ability, that the doctrine cannot long survive.

Talleyrand is reported as saying of Napoleon's execution of the young and innocent Duc d'Enghien: "It was worse than a crime; it was a blunder!" The inequity of the modern distribution of wealth has far surpassed being a huge injustice; it has become the biggest and grimmest world-joke ever perpetrated. An institution may long survive recognition as a tyranny, but it cannot long endure being a crass absurdity.

In the *Scientific Monthly* for October, 1916, appears an article entitled: "Our National Prosperity: Distribution of Property and Income," by Charles A. Gilchrist, in which he says:

> "That the present distribution of wealth in the United States is exceedingly unequal is yearly becoming more and more apparent to even less thoughtful people. The question of the injustice of the distribution of either property or income, or of a remedy for that injustice, is not here at stake. Our purpose is to present graphically the spectacle of inequality as it exists, and its relation to our national prosperity of which we are accustomed to boast."

Mr. Gilchrist then constructs curves showing the distribution of property and income, based in part upon the work of Charles B. Spahr, "The Present Distribution of Wealth," already quoted in this book, and in part upon the figures of Scott Nearing in his book entitled "Income." The foundation of all are the data collected by the government in connection with the income-tax.

His conclusions as to the state of affairs, even so far back as 1890, long before the Spanish War had given its modern acceleration to commercialism, are these:

> "One per cent of the people own more than the remaining ninety-nine. Think of it! One half of the national wealth practically crossed out, as far as national prosperity goes, since it is the property of but one per cent of the population! Four-fifths of the people own but one-tenth of the wealth!'

He then constructs a curve for the year 1913 from the data of the income-tax, giving incomes in terms of the number of individuals enjoying them—the few having much and the many little. That is to say, if the entire adult population of the United States (that is, those concerning whom we now possess income-tax data) were lined up in a single rank, with each person holding vertically upon the ground before him a wand the height of which represented, to some suitable scale, his income; and if we suppose these individuals assorted so as to put the poorest at one end of the line and the richest at the other; then a curve drawn through the upper ends of all these wands would have the general shape of a hyperbola.

That is to say, at the "poor" end of the line this curve would be flattened out almost into a straight horizontal line, so many would there be with small incomes almost alike; but not quite a straight or horizontal line, because there is some slight difference in income between each two contiguous men. But at the other end of the line, at the "rich" end, the curve would bend upwardly until it became, at the last man, almost a straight vertical line, so much would each individual income differ from the next, as one passed from one man to the next richer one.[1]

The equation for this curve through the wand-ends Mr. Gilchrist finds to be

$$xy^2 = a$$

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[1] It must not be forgotten that the "poor" end of this line stops, from the nature of the data, at the smallest income recorded by the income-tax returns—$4000 for a married man. Hence all this applies only to a small fraction of the population—the richest fraction. Yet it shows the general principle of the distribution of wealth.

It shows the increase in wealth from man to man, as one proceeds from the "poor" end to the "rich" end, as itself increasing gradually, the change being everywhere smooth and gradual.

Now the ambition of every person in the land is to better his position in this line, relatively to his fellows. This is the wholesome tendency in human nature properly called rivalry or emulation, but which we mistakenly include under the term competition. The steepness of the hyperbolic curve, at any point, shows how much is to be attained in this way, in increased income, by victory over the next man ahead.

At the "poor" end of the line—although the poorest enjoys an income of $4,000—this increase in income, from one man to the next, is only about one cent per man. Amongst the really poor, then it must be some very minute fraction of a cent. Yet at the "rich" end of the line it is $2,280 between one man and the next!

Yet even here we have only a part of the truth. For the data reveal, not the income of each individual, but incomes of whole groups or classes of individuals. Therefore the maximum difference between the individuals composing the richest group must be considerably greater than that stated.

Yet, accepting figures as they stand, the situation, as Mr. Gilchrist states it, is this:

> "A man in the seventeenth [or richest] group, in order to raise his income by $2,280, must get ahead of but one other man in the race, whereas a man in the first group [the poorest to appear in the income-tax returns] *must pass some 228,000 others in order to raise his income by a like amount.* It all means that the greater a man's income the easier it is for him to augment it—a state of affairs curiously incongruous, since the greater his income the less need for him to augment it.
>
> "But this is the principle in distribution that accounts for the enormous inequalities of property. It is what Herbert Spencer would call an example of the law of the 'multiplication of effects.' Or in current platitudes, 'nothing succeeds like success.' It would seem to show that a condition even approaching equality was one of unstable equilibrium and that society contains within itself the seeds of economic destruction. We do not assert that such is the case, for there may be other seeds in society with an opposing tendency; *but such opposing forces are not now, at least, in evidence."* (Italics mine.)

A condition of unstable equilibrium means that the first slight accidental disturbance will lead to an overturn or an explosion.

Since Mr. Gilchrist can see no evidence of any stabilizing forces, we fail to understand his reluctance to assert frankly and emphatically that his study of the data as to incomes forces one to the conclusion that an overturn or explosion of society is imminent and inevitable, unless the whole principle of our economic system be reformed.

When we criticise this attitude in unqualified terms we must not be misunderstood as disposed to criticise Mr. Gilchrist individually, because in its adoption he is merely representative of what is almost universal in collegiate sociology, namely *intellectual timidity.* That is a thing quite distinct from either physical or moral cowardice, but it is none the less undermining to the structure of society, and is therefore to be held up to public execration.

But in this we are dealing not with any phenomenon of individual psychology, at all, but with one so universal in collegiate halls that it must be recognized as an institutional defect in our form of educational organization. The causes of this defect will be treated in the last chapter.

It is this inequality and inequity of incomes, with the natural desire to regain or approach equalization, of course, which lies back of every graduated income-tax. So obvious is the inequity of our present distribution of wealth that it is instinctive to attempt to counteract it by sheer, direct force.

But taxing out some minor fraction of this inequity certainly can never bring back the situation, which is rotten at heart, into true equity. Moreover, society having once decided to rely upon the commercial system for its very existence, *it must permit that system to live its selfish, accumulative life, or else society must be ready to die with it.* We cannot build an economic system upon faith in selfishness, as the only reliable human sentiment, and then quarrel with those who live up to our faith.

The larger incomes cannot be taxed into anything approaching equalization without the removal of all incentive to commercial enterprise. It is not that such a tax would be inequitable to those taxed, but that *it would harm society in general, by collapsing its supply of commercial credit.*

It is not that a graduated income-tax may not be the most equitable means for meeting governmental expenditures which amount, as now, to only some five or ten per cent of the aggregate commercial incomes. It is that *the imposition of any tax* *such as would be competent to counteract that acquisition of huge fortunes would immediately collapse the valuation of all Wall-street securities, and paralyze all production, transportation and consumption.*

Society must choose between commercialism or something better. We cannot have two incompatible economic systems side by side. We tried it in 1830-60. Conflict became inevitable. If we elect to rely upon interest-bearing ownership-in-industry as our chief source of circulating-medium, and upon selfishness as the sole psychic motive force, then we must accept not only huge fortunes, but *indefinitely swelling fortunes,* as an incident thereto.

If, on the other hand, we depart from this faith we must abandon commercialism altogether. The instant we show sure national signs of a wavering in our choice, our circulating-medium will collapse. There has never in the past been any system of state-bank currency-notes, greenbacks, confederate currency, bimetallism or the like which was so delicately liable to sudden and complete collapse in valuation as is our present huge accumulation of interest-bearing securities.

It is hardly necessary to reassure the reader here that this book regards all these huge incomes as inequitable. The point is that you cannot have your cake and eat it too. You must either let commercialism live the selfish, sordid life of apoplectic greed which alone is natural to it, or else you must bid farewell to it altogether. You cannot tax big incomes back into even an approach to moderation and parity—after letting all the injustice and waste involved in their accumulation proceed untouched—that the whole commercial system will not come crashing upon the people's heads.

Any such a policy is a weak closing of the stable-door after the horse has been stolen. It is a childish attempt to unscramble the eggs. If the commercial system is to be abolished—good! But it must be done by deliberate, conscious plan—by first cutting out the roots whence these big fortunes grow, and with some adequate substitute provided in advance—rather than by a blundering effort to carve off by inches, surgically and vindictively, these economic hydra-heads which we ourselves have forced into existence, by our daily homage to the spirit of commercialism at the altars of the retail shop-counters.

One might as sensibly try to slice up an inflated balloon. The first slice kills the job. One might as well try to temper the tyranny of a despot by a gradual, painless assassination. Emerson says: "If you strike a king, *kill!*" For if you are afraid to strike to kill you would far better accept, with your forehead on the ground, anything he chooses to hand out to you.

The Census

Equally involved in this responsibility for the prediction, and hence the softening, of coming cataclysms, from the basis of past history, are the universities and the census-bureau. Hitherto the census has been regarded as merely interesting. But from now on it must be seen to be vital. If there be any weight in the idea quoted from Condorcet at the beginning of this book, namely:

> "If there exists a science of predicting, or directing or of accelerating the progress of the human race, the history of its past should be the first foundation therefor"

—which idea the author seconds with all his heart—then the census-reports must assume a dignity and responsibility for recording that past, truly and frankly, which is of the highest rank. The census-bureau should be held to both a strict and a broad sense of its duty. For at present it is plainly inclined to lapse from what should be its first duty, namely, *a display of the major features of our national progress,* into a mistaken loyalty to microscopic accuracy, which should come a late second in relative importance.

For if the future guidance of this great nation, or internation, is to turn, as it should, upon statistical data derived from our census-reports, it will not be upon any super-exact evaluation of some knife-edge detail that decision will teeter, but upon the broadest sweeps of world-tendency. Here lies the duty of the census-bureau.

By the year 1921 the census of 1920 will have recorded forever whatever knowledge we are to have in the future of our progress during a decade which has comprised the biggest and most significant social changes of any of the thirteen decades of our national existence. On the data as to these changes must be based our planning of our policies for 1925 or 1930. Therefore if this coming census shall have failed to cover these major issues of our times just outlined, including the enumeration and classification of occupations in reference to commercialism, and of unemployment, as the census of 1910 has failed to do, the neglect will amount to a national catastrophe.

Public Ownership and Commercialism

It is commonly held, throughout a wide stratum of public opinion which has already lost its faith in commercialism, yet without crystallizing upon anything better—being in this much like Kipling's raw recruit, who "'ad lost 'is gutter-devil and 'adn't found 'is pride"—that processes are now at work, in the slow extension of governmental ownership, to negative this menacing growth of commercialism. Therefore, although no adequate summary of the topic of public ownership can be given here, it is necessary to inquire briefly: Is any gradual abolition of commercialism through public ownership practicable?

For instance, as these lines are being written the daily press announces the government's prospective expenditure of some fifty millions, as a war-measure, upon appliances for food-supply. This and similar military precautions taken by the American and British governments have given rise to a widespread, but unfounded, belief that the close of the war will find the world a long stride away from commercialism, and towards economic co-operation of some sort, if not crass socialism.

But we fail to see any signs of such. We will overlook, for the moment, the fact that these are purely war-measures, and that the invisible government embodied in commercialism, having given way through patriotism while the war was in progress, is sure to swing back into line, when once peace is declared, with an irresistible demand that it now have a free hand. We will examine here only the immediate effect of the act. Does it result in even a temporary reduction in the volume of commercialism?

Not in the least. Suppose this fifty-million move to be carried out: *What becomes of the fifty millions paid for the food-facilities?* Does anyone suppose that it will remain in the hands of the recipients, in the form of hoarded currency? For then alone could it avoid forming a basis for an increase in the volume of commercialism—and perhaps not even then.

For even if left as idle bank-credit it would still form such a basis to a degree, for the purchase of new securities by the bank, or for loans which would result in that. At the same time, the bonds sold by the government to procure the fifty millions would themselves draw interest, constituting one form of commercial ownership of the food-facilities, if an indirect one, in spite of the governmental control.

But in the normal run of events *this fifty millions will immediately enter the market, in one way or another, as a bidder for new, raw securities, or for other paper the sale of which releases demand for new securities.* Indeed, the prospect of such a governmental move as this could hardly be announced before the engravers would be set to work to print the new commercial instruments with which to absorb, to private profit, this additional public credit.

But more, the commercial enterprises which are sure to be launched with the aid of this fifty millions of new credit-money need no more than be established upon a paying basis—a matter often of only a year or so—than their stock, which sold originally for next to nothing, will have risen to ten times that value. The fifty-millions-worth has thus become five hundred millions of new debt and credit, owed by the Consumer to the commercial clique!

This is no fairy-tale. There are scores of stocks on 'Change to-day on which the rise in valuation since original issue has exceeded this ten-to-one illustrative ratio. Thus will our governmental venture in food-facilities—or it might as well have been railways, or telegraphs, or coal-mines—*have canceled not one dollar's worth of existing commercialism, and have brought about indirectly an increase measurable perhaps by hundreds of millions.*

Anyone who feels that the Government's war-invasion of business has meant a decline in commercialism would do well to note that the single year of 1916-17, with its remarkable outburst of governmental activity in industry, yet witnessed a growth of over 53 per cent in the number of our millionaires!

But the end of commercialistic expansion due to governmental ownership has not yet been told. For the ownership of these hundreds of millions is indeterminate. In order to determine it by combat there will be attracted into the field a fresh enlistment of speculators, brokers, bankers, clerks, bond-salesmen, stenographers, book-keepers, etc., and all those who feed, shelter and amuse them. What the amount of all this would be, indeed, if it were the railways or telegraphs or coal-mines which were involved, instead of a paltry fifty millions' worth of food-appliances, may scarcely be imagined.

But, whatever they might be in amount, they would all inevitably be upon only one side of the account, namely, that going to exaggerate commercialism. *The only thing which will even arrest the growth of commercialism—and even this will not reverse that growth and annul the commercialism already existing—is the absolute prohibition of the issue of any new securities, of any sort whatever, or the embarkation of individuals upon any new commercial scheme.*

But the task in hand is not to explore the tempting question as to what would happen if this prohibition were undertaken, but merely to note current history to date. As a part of that history the fact must be emphasized that *no extension of governmental ownership yet accomplished has ever overtaken in the slightest degree the simultaneous expansion of commercialism.*

There is no evidence that any conceivable acceleration of such a governmental policy can do aught else than accelerate the growth of commercialism faster than itself. Any advance in governmental ownership pushes commercialism ever on in front of itself, and further out of its own reach, much as a horse will push ahead of it the wisp of hay which its boy-driver has tied on a pole extending over its head—except that the hay can never move faster than the horse, whereas *commercialism is ever propelled further out of control by each effort of the government to overtake it.*[2]

As war-measures these extensions of governmental control are most interesting; but as means for annulling commercialism —even if such were their admitted object—they are utter failures. For even if the further issue of securities might be prohibited by law, the result would not be to repress commercialism, but to repress industry; for industry, having no more natural circulating-medium, is forced to rely upon these issues for the fluid essential to its life, and hence must collapse when it is withdrawn or estopped.

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[2] Attention has been called elsewhere in the book to the fact that the inauguration of the parcel-post, which represented a step forward in governmental enterprise such as might be expected only once in several years, had, even if wholly successful in conceling commercialism to its entire figure, done only what *the natural growth of commercialism would make good in ten days!*

Just as we saw how commercialism enforces a fixed proportion of food-production to demand for food, or to possibility of production, regardless of variation in either—or of proportion of advertising to reading-matter in our periodicals, regardless of the supply of news—so the proportion of industry-support to Consumer-tax embodied in the current issue of securities is fixed by the volume of commercialism prevalent at the moment. All these things can vary, not as public desire dictates, but only as commercialism happens to vary—at the behest of still deeper forces which it is not the province of this volume to explore.

The expansion of our life-support is not subject to control by legislation. It cannot be stimulated either by the encouragement of industry or by the discouragement of commercialism; because, so long as the latter is allowed to exist at all, it must dominate the former. Stimulate or repress either of these two, and you stimulate or depress both together.[3]

The economic situation to date has been becoming bad at such a rate that all our statistics fail to express it. Yet the prospect for the future is worse. For now, with the advent of the Great War of 1914, and especially with America's entry therein, there has come upon us the combination of the two sorts of militarism simultaneously—martial militarism added to commercial militarism. Without any permanent diminution in the volume or intensity of commercial combat, military combat upon an unheard-of scale has been added. With no retirement of private interest-bearing credit-instruments, nor even any appreciable arrest of their growth, governmental credits have been added thereto at a rate never before dreamed possible by man—probably to the extent of two hundred billions in all.

The present world-war is the greatest tragedy of history. Its explosions literally shake continents. Yet there are signs that the biggest mine of the western-front is but a pop-gun compared with that magazine of high explosive now being heaped up in the form of commercial credits and congested cities, setting the stage for a near-future drama at home far more gigantic than that now being enacted abroad.

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[3] The frantic efforts of those intellectually timid, but otherwise worthy, people who attempt to improve living conditions in one way or another, yet without regard to these broad laws, remind one of one of the freaks in Artemas Ward's famous museum. It was one of the Siamese twins—"the only one which had been separated."

Reform.—Tribute has already been paid in this book to the vital importance of an adequate volume of credit, in permitting the rapid development of a country's energy and resources. However the interest-bearing feature of commercial credits has been denounced herein, effort has everywhere been made to emphasize the necessity, in planning reform, to preserve the factor of credit while removing its burden of interest-charges.

What all people are coming to believe is that we need reform in our system of production. They feel, in one way or another, the pinch of necessity, and so conclude that it is our productive system which is at fault. The socialists follow this line of argument with the added error of defining production as whatever is done for wages.

But the trouble is not here at all. Our productive system—the factory-system—is well nigh perfect, as a system, and is now producing more per capita than ever before in history. It is our system of *interchange* which alone is at fault; and in any such a system the feature of *credit* performs the most essential function. It is these which need reform.

But, as a step in this direction, public ownership has been a total failure. In so far as it has proceeded through equitable purchase it has failed to reduce the volume of interest-bearing credits, or to substitute any other form for them. In so far as it might proceed through confiscation, as in the case of the parcel-post, it finds itself face to face with a hostile public opinion. It has not yet won public faith. There is no *credit* there. The people are no more in a position to feel the good due to what little public ownership we now have—lost as it is in the vast tide of commercial prices—than they are to appreciate the evil latent in commercialism, without a much more systematic education in that direction than is now current.

CHAPTER XXIII

THE EVOLUTION OF AMERICAN CIVIC CONSCIOUSNESS

In the growth of our land from the untrammeled conditions of its youth, when the individual will had a play all but unlimited by social obstacles, down to the present day, when the problems of social environment have far outgrown those of nature's mysteries, man's consciousness of this change has followed slowly and reluctantly. There has always been a lag between the real need of the day and his recognition of it in action.

It is from this lag that all of his sufferings have arisen. It is to protect him from this lag, by the acceleration of his scientific wisdom into parallel with his forward, unthinking energy, that is the function of professional sociology.

In 1850 the privately owned factory-system, while already some sixty to one hundred years old, was still impotent as a major factor in affairs. Most production was still conducted upon the cottage-system. Markets were narrowly restricted by distance and by lack of transportative facilities. Commercialism was even more crude than industry. Therefore it was but natural that philosophies should then be based upon the individual will.

The people, enjoying unusual prosperity and license in the novel combination of a rich and virgin continent with political liberty, were impatient of warning or restraint. Their free environment protected them from the pressure of economic forces. Their governments were still too boyish in responsibility to admit of success in public enterprise, and were yet too independent to confess the need for that civic sense which might bring it.

It was only about a decade previously to 1850 that the country's first attempts at building canals and railroads, through public enterprise, had proven disastrous. The opportunity for special privilege latent in the alternative to this method—private initiative and finance—had been born only with this disaster, and had not yet become conscious of its power.

Ideals of patriotism then consisted in spread-eagle oratory, coupled with a sincere readiness to fight for liberty—or for the mere fun of it—at the drop of the hat. Roosevelt describes, among the recreations of those days, fist-fights in which the gouging out of eyes was still admitted as a standard feature. Prize-rings were still habitually roped off in the streets of New York City. "Stump-speeches" were still literally such.

It was a time, too, of reaction against the chafing policies of federalism which the unwelcome Revolution, the forced adoption of a national constitution, and the warning War of 1812, had successively obtruded upon a reluctant public opinion. Everyone, north and south alike, wished to be free to concentrate upon making money, without hindrance by broad questions of national progress or abstract considerations of humanitarianism.

Then gradually reared its head, as the fruit of this selfish neglect, the unwelcome agitation over negro-slavery—as unwelcome as is now our parallel agitation over the question of economics. Then, for two or three decades past, those interested in slavery had been laying increased stress upon "states' rights." By 1833 this had led to the "nullification" movement in South Carolina—summarily quelled by force of authority, by Andrew Jackson, but without touching its cause. By 1836 this trend had led to the formulation and proclamation of the so-called "gag-rule" in Congress, according to which the South denied the right to Congress even to debate the topic of slavery, as a private personal matter belonging to the South alone. This was a measure which, had it been met by the North in the spirit to which the latter responded to the firing on Fort Sumter, the Civil War would never have been fought.

Everywhere free and incisive debate was frowned upon. By 1856 the entire commercial interests of the land, both north and south, had united in that "safe and sane" campaign against the "seditious agitation" of the abolitionists—to conserve business and its profits at the expense of a free discussion of the humanitarian topic of slavery—which elected Buchanan. And Buchanan came into office with the avowed promise to repress that agitation by force, and thus attain "peace." Yet his name comes down history as that of a puppet, the only effect of whose subconscious acts was to delay the discussion of slavery, until it had been forced to exchange its peaceful garb of humanitarianism for the martial gear of a political question able to rend the federal government into twain—to make it totter so that even Lincoln doubted.

Thus was revealed the identity in spirit among all profit-seeking oligarchies, whether in eighteenth-century France, in pre-victorian slave-owning American South, in Bismarckian Prussia or in twentieth-century commercialistic American North. Thus that instinct in the North for making profits regardless of right which had originally peopled the South with negro-slaves, stolen from Africa and transported across the Atlantic under conditions more regardless of mercy than any which have tarnished American history, now again led the northern commercialists into a sympathy and co-operation with the southern slave-owner, the ethical significance of which—as a certain precursor of social convulsion—we still fail to grasp.

This stupid, reactionary tendency against free speech in 1856 forced upon us in 1861 the Civil War, as the only possible automatic adjustment of a not very intricate difficulty, which we had persistently refused to solve by debate. It also acted to bring our federal organization, which was loose and crude under the old states' rights and slavery ideas, into consonance with the growing solidarity created by the railway and the telegraph. But the economic tendency which this reactionary policy implanted in our traditions—that of reliance upon private selfishness for all public initiative—yet remains to be worked out into adjustment with modern conditions.

For, however the Civil War may have jumped ahead our political ideas, by establishing forever the supremacy of federal over state interests, it had no effect upon the trend of commercial affairs except to accelerate them. The issues of the war, while simple relatively to what confronts us now, were yet too intricate for it to be perceived, at that time, that the suddenly evil aspect of the centuries-old institution of slavery was due solely to its having become, through the catalysis of invention, *a big and profitable business;* nor that, while the business of owning slaves might be discontinued, that of owning other things industrial might prove to be, in the long run, just as dangerous to the nation as slavery.

For the Civil War was fought, it must be remembered, not out of commiseration for the slaves, but in order to preserve the nation. It will be the same in our coming economic crisis. Only when civilization totters will we act.

The triumph of the Republican Party after the war, fed by the war-issues of commercial credits and the prosperity resultant therefrom, and no longer checked by Lincoln's sense and moderation, launched the country into a era of reckless commercial expansion. This was at first unconsciously, but soon deliberately, fostered by the tariff—a policy which has continued to gather strength until recently.

The resultant panics of 1873, etc., were attributed wholly, as was true only in part, to defects in the currency-system. That the cause of these crises might lie deeper than that, in the insidious poison of profitable special privilege, was not then understood.

The fact of commercial expansion may have been checked automatically, for the moment, by these panics; but faith in the commercial system remained increasingly ardent. As soon as recovery permitted, "progress" was resumed, in the commercial sense of an unending issue of interest-bearing securities, of the intrusion of increasing numbers of persons into profit-seeking vocations and of the maintenance of prices at the maximum which traffic would bear.

The war-credits were being retired and so the general price-level fell; but the money paid for the bonds by the government found prompt reinvestment in commercial securities. Of the soldiers mustered out of the armies many enlisted anew in commercial militarism.

By the time that reaction from the Republican momentum acquired from the Civil War had again placed the Democrats in ascendancy, in the election of Grover Cleveland, the obvious weaknesses of our currency-system had centered interest upon the issue between the gold standard and bimetallism. For the next quarter-century that and the commercially profitable tariff monopolized public debate.

On the one side the people, suffering from pressure due to commercialism, yet not understanding just how, attributed their ills to the gold standard. On the other the commercialists, feeling the innocence of that scape-goat, accused the bimetallists of a dishonest intent to repudiate debts. On both sides the original and obscure, but pregnant, error in our economic policy of 1840—the abandonment of public for private enterprise in public works—was quite forgotten, in the face of the impressive commercial prosperity of the land.

Yet already commercialism had proven the potency of its "invisible government," both in its suppression of adequate debate of the slavery-issue until war had become the only solution, and in its later veto of any revision of the tariff by public will. For repeated popular votes in favor of revision came to naught.

Originally the tariff had been a war-measure only; but now it had proven so profitable an aid to commercialism that all parties, including even the Democratic, had become blinded by its glitter and silenced as to its faults. Full thirty years of national devotion to its active discussion were required before even its slight modification could be obtained.

But by that time our infantile commercialism had grown to such proportions that the invaliding of its foster-parent, the tariff, made no perceptible dent in its self-sufficiency. Tariff-reform, for a generation an idol before which had been burnt ship-loads of red fire, when finally accomplished, started, when cast overboard, no visible ripple upon the placidly rising tide of commercial profits.

There is nowhere in history any proof of the futility of trying to effect progress in the face of profitable special privilege, through debate alone, so striking as was this fiasco of the long-sought tariff-reform. The only other instance comparable with it is that equally childish fizzle, the enforcement of the Sherman anti-trust law—to an increase, rather than a decrease, of both the profits and the costs of doing business, the two factors which work together to burden the people into discontent.

By the time that the closing decade of the nineteenth century had been reached all parties had agreed, willingly or unwillingly, that commercialism must be fostered. At the same time, the inevitable tide of groping protest against these mysterious economic hardships, oppressing the people so incomprehensibly in a free, rich continent, arose steadily over the land, in a series of protesting reform-movements.

First came the "mugwumps," the first to break the hidebound traditions of that day as to the debate of all issues in terms of federal policies—Republican versus Democratic. Then came the populists, specifically expressing the need for a better distributed system of general credit, based upon some foundation broader than gold, in their "sub-treasury" schemes. Finally appeared the socialists—a movement which had figured in European politics ever since the appearance of steam-power had transformed the old political discontents of the eighteenth century into the economic ones of the nineteenth—with a program deliberately posing economic factors in the title-rôles of the drama of progress.

But the fruiting of all these protests was then, and is still now, submerged, choked and paralyzed by the vastly more rapidly rising weed-growth of commercial profits. The flood of prestige which always attends profitableness is drowning every faint voice of warning. It was upon the crest of this tidal flood that McKinley rose into power, as the avowed champion of commercialism, advocating an ever higher tariff. It was because the zenith of this tidal rise had not yet been reached that Roosevelt's demand for "a square deal for the people" proved as premature, and as impotent to reverse its flow, as have all other protests.

His denunciations of the "malefactors of great wealth," as individually responsible for the country's economic vagaries, will long stand as witness of how little the true situation was grasped by even the most prominent of men. For it is not the commercialists, but *the institution of commercialism,* which has invaded our liberties, distorting the people's square deal into a three-cornered hat. Driven by the forces set going by this institution ensconced amidst the hundred millions, the commercialists themselves are but puppets, animated into a destructiveness of the degree of which they are quite unconscious.

The result of all this following of the line of least resistance has been a growth of commercialism new to world-history, in its magnitude, in its instability and in its disregard of public equities. With it have grown the normal fruits of commercial militarism as a national philosophy—special privileges for the few, discontent and disrespect of the law by the many, a relative deficiency in food-supply, and prices rising relentlessly for all.

Industry, naturally modest and pacific, has thereby been forced to adopt, as a protection against commercial aggression, a hard shell of combative and arrogant trades-unionism. Commercialism, recognizing in this—its natural child—a foeman worthy of its steel, has adopted toward trades-unionism an attitude of armed neutrality. For capitalism knows, as trades-unionism evidently does not, that the real source of life-blood for them both is the Ultimate Consumer.

Both capitalism and labor are daily improving their organization for offense and defense. It is only the general public of Ultimate Consumers, which must pay the cost of both the armaments and their use, which is not organizing at all.

But in all this growth of the crisis, progress has consisted not so much in the introduction of novel methods as in the spread into the respectability of the land of those previously discountenanced, and therefore rare. There is probably no date so early that any of our modern methods of high finance cannot be found in embryo, practiced by an occasional sharper. But since then these questioned practices have spread—always against the frowns of the still uncontaminated, yet with a motive force back of them, in their profitableness, which none could long resist—and so by familiarity have ceased to be questionable.

Thus, when our national Constitution was being written a banker was scarcely received in polite society. A little over a century ago stock-broking was considered as far below social decency as slave-driving had become in 1850, or as stock-watering was in 1875. Yet all through that period the ownership of slave-ships was winked at.

The methods pursued by the railway-wreckers, kite-tail bankers and mine-salters of a half-century ago, then discountenanced by every merchant, have to-day become, in effect, the approved practice in every line of supply to the people—not that crass deceit in the adulteration of commodities is longer so common, but that it has been replaced by an even more predatory deceit as to the value to the Consumer embodied in the price asked.[1]

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[1] That commercialism is still not above instigating its votaries to common larceny, through adulteration of quality or weight, may be judged by the statement made before the Weights & Measures Association, of New York City, by Mr. Franklin Brooks, author of the law governing the regulation of weights and measures (as reported in the *Times* for May 20, 1915) to the effect that the law was being violated "all over the city." He estimated that the people of New York State lose about sixty million dollars a year through violations of this law.

Any disposition to "muckrake" could collect any amount of evidence to the effect that commercialism, in addition to being an absurdly

Man does not object to sinning, but to seeing himself sin. It is not the immorality, but the obviousness, of swindling the Consumer which has disappeared. As society has become more intricate, many methods of fraud which before stood out too baldly for wide adoption have now become so "lost in the shuffle" as to be widely practiced, although still discreetly cloaked.

Thus has our civic consciousness gradually altered under economic stress. Whereas the more stable strata of society are now as patriotic as the country's founders could have wished, yet all classes are simultaneously drifting out of touch with the country's specific needs. The lucrativeness of commercialism is blinding us all to the true nature of patriotism. Those who are directly involved in commercialism can see no flaw in its golden charms. Those most heavily burdened by it are blaming our innocent political government for commercialism's sins, and are becoming disloyal bolshevists.

The great mass of in-betweens are making the equal mistake of looking to educational or psychic development of the individual for the reform of an evil which offers no slightest evidence of being founded upon any imaginable defect in the individual—except, perhaps, his blindness to the evidence of economic fact. We cannot grasp the power inherent in institutional relationships to convert individuals into puppets.

inefficient system—which is the chief count upon which it has been indicted here—is often a crass and conscious fraud. With the larger commercialists technical fraud is of course largely tabooed. It is now a half-dozen years since the last epidemic of conviction of prominent corporations for fraud manifested itself. But in innumerable petty ways, like the lining of chocolate-packages with pasteboard, and a myriad of other contemptible methods of deceit of the Consumer which do not fall within the pale of the law, commercialism is more guilty to-day than ever before.

MEZZANINE CHAPTER

THE AUTHOR'S POINT OF VIEW

(THIS mezzanine chapter is written after the entire remainder of the book has been completed. It is inserted here, however, following the impersonal scientific analysis which has preceded, in order to anticipate the more personal conclusions which the author draws therefrom in the later chapters—January, 1920.)

The central idea of this book arose in the course of a friendly controversy with one of the greatest minds in American history, Edward Bellamy, during the years 1890-93, and was first committed to paper in 1898-1906, in the manuscript for the author's "Cost of Competition." At the earliest of those dates the world did not see the word socialism in print twice a year. Economic revolution was the farthest possible from the minds of all.

To-day this same central idea, re-attacked in 1913, has gradually ripened into the present book, finally to appear at a time when the world is stricken with fear of revolution and hatred of all radical ideas. Sedition and treason are the issues of the day. All who question in any way the existing economic régime are open to denunciation, upon the score of disloyalty to our polictial régime—which is a very different thing altogether.

Therefore it is important that the author should announce specifically his loyalty to the American government and to American traditions of political liberty. He has tried to make it plain throughout this book, indeed, that it is this very loyalty which impels him to his attack upon commercialism, as a despotic oligarchy which is as sure to disrupt our government as slavery was bound to do. But there are many who misunderstand.

The author's mother's family settled on Cape Cod about the year 1650, and members of that family have since fought in every war which has aided in building our Constitution into what it is, until the male stock ran out. The author's father was English-born, coming to this country in 1832. The author was born in Ohio.

The author believes that our American political democracy is the highest and best form of political government extant. He believes that it accords liberty to all as nearly as any political government can do. He believes that all our troubles arise not from our political imperfections, but from our economic institutions, wherein we completely lack organization or constitution. For the natural economic sovereignty of the Ultimate Consumer over matters economic now lacks recognition as completely as the equally basic sovereignty of the individual voter over matters political was unrecognized in 1750.

Our failure to understand our social problems rests primarily upon our inability to distinguish clearly between these two functions. The function of the individual as a citizen of the political world, which he exercises as a voter, is one thing. It is organized and protected by the Constitution of these United States.

But the function of the individual as a citizen of the economic world, which he exercises as an Ultimate Consumer, is totally distinct from this. It is now quite unrecognized, unorganized and impotent. Its mere assertion is assailed as treason.

Therefore the author decries any attack upon our political government, as destructive of good for all classes, and helpful to none—not even the most oppressed. His aim is to build further, not to tear down. For that reason he would guard most jealously every atom of constructive social evolution which has yet been accomplished, at the price of so much precious blood and pain poured out in past American history.

But (he may explain to the radicals) he decries all attack upon our political government for another reason also. This is that *our political government is dominated by, and is therefore impotent before, those huge economic forces which are debated in these chapters.* No assault directed against the page can prevail against the knight.

Attack upon our political institutions or administration is not only misdirected, in that they are not responsible for our economic ills. It is futile; because Washington cannot control commercialism if it would. And, so long as the majority of the people believe in commercialism, of course it will not, and should not, try.

There exists nowhere, either in monarchical, military Europe nor in democratic America, nor even in soviet Russia, any government having the power to restrain these gigantic economic phenomena. If the socialists make a tragic mistake in believing that their form of government is able to overrule these natural economic laws, our own patriotic but conservative public opinion makes a far greater, but less excusable, mistake in thinking that our representative political democracy, which is dependent upon rather than superior to commercialism, embodies this authority.

It does not. That power does not now exist anywhere on earth. We have not yet even attempted, let alone accomplished, the organization of the only authority truly sovereign over commercialism, namely, that of the Ultimate Consumer. The whole problem of modern sociology is how to create such an organization. The whole menace of social travail is involved in the labor of its coming birth.

For the pending economic crisis, we have shown, pivots upon two basic, but quite modern, cancerous growths within the body economic. One of these is the steady migration of effort away from productive walks of life into the more lucrative ones of commercial combat over the produce—a migration now measurable over the last three-quarters of a century, and uncontrollable except by the abolition of all commercial opportunity. The other is the endless, cumulative issue of interest-bearing commercial indebtedness against the Ultimate Consumer.

Therefore no power may prevail against the rising cost of living, the increasing uncertainty of employment, and hence the growing menace of public discontent, unless it is competent to

(1) Coerce men out of commercial vocations, back into productive ones; and

(2) Restrain, annul and reverse the cumulative issue of interest-bearing securities.

Neither of these powers is now possessed by our political government. They are not anywhere latent within the Constitution of these United States, nor within that of any other government.

But our real trouble lies not in this fact, for the Constitution can be amended, but in the irremediable fact that *neither of these powers can be imparted to our government without the precipitation of a revolution, not among the I. W. W., but in Wall street and in the corner-groceries of Arizona.*

The germ of this power is latent within the Ultimate Consumer, and there alone. But in this capacity or function *the hundred millions are now as completely lacking in organization, recognition, or even consciousness, as their political ancestors were as to their sovereignty as voters in the good year 1750!* And a pretty revolution it took, with a price upon the heads of those rebels, Washington, Adams, etc., before that sovereignty became even partially organized and recognized, in 1788!

For our existing government to coerce men, openly and directly, in their choice of a livelihood, or their selection between idleness and work, or their free determination of the wage for which they will work—all of which were involved in the government's unfulfilled anti-strike program of late in 1919—would amount to a direct invasion of those personal liberties which have been sacred to American soil ever since it had a government of its own. It would land us two centuries backwards, in the feudal system again. Any such a policy will be fought deliberately by our very best American manhood.

Moreover, these liberties are sacred by more than tradition. They are rooted deep in universal natural law. Whatever may be our ultimate solution of the social problem, it *must* rest upon respect for these liberties.

On the other hand, for our government to attempt to reverse, either directly or indirectly, the present rapid accumulation of interest-bearing and profit-bringing securities, would equally result in revolution. Such a revolution would arise not by conscious, personal revolt from below, but by automatic financial collapse at the top. It would take its origin not in the proletariat, nor even in the run of patriotic Americans, but in Wall Street. It would automatically shut down the bulk of our factories and railways within a week. The unemployed and unfed would then do the rest.

Our entire industro-commercial system now lives, moves and has its being upon these interest-bearing credit-instruments, as its circulatory life-blood. Any effective thrust in that direction, *by whatever measure,* amounts to an incision of society's carotid artery. Any such an act as that will collapse Wall Street and Washington alike, all but instantaneously, into a welter of our social life-blood.

Whatever may be the far-reaching conclusions enforced by a recognition of this impotence of our political government over our economic government, our present purpose is merely to point out the fact. Also it is to show that the author, in emphasizing this fact, is doing his land a most loyal service, rather than inciting to sedition. He cannot expect to adduce here enough argument to convert every reader as to the truth of his position; but he can establish the purity of his motives.

For revolutions arise automatically, we shall see, not from talking about them. They arise solely from neglecting to talk about, and to act about, their causes, until the latter have gathered such impetus that talk no longer avails.

The Foundation Requisite for Public Opinions.—In the preface to this book it was mentioned that the author had contemplated a second part to this, which is to appear later under the title: "The Evolution of Social Crises," being a study of those general principles of growth which have underlain all wars and revolutions, in all lands and all recent times. Some such a careful study of general principles must properly precede any drawing of conclusions as to our pending crisis, from the data collected above.

Every man who expresses an opinion as to the tendencies of the day should remember this propriety. No man has any right to express publicly any opinion upon the broad social problems of the day until he finds himself equipped with a complete philosophy of social evolution, based upon the universal laws of natural organic evolution and competent to explain, in a unitary way, all the social crises of recent history.

Such a work upon social evolution was already mapped out by the author, years ago, early in the development of the present book. It was to have formed the closing portion of this book. The publication of the next two chapters of this book, which consist of conclusions, should, properly speaking, have awaited the appearance of this complete philosophy.

But lack of the leisure requisite for committing so large a study to paper promises so dire a delay before it may be ready —and in the face of great urgency of public need—that this book must go forth now, equipped with conclusions which, however solidly founded upon data as to American economic history, are supported with only a skeleton of argument as to general principles of social evolution. In the closing chapters of this book will be found fragments of such argument, supporting the deductions from the data which precede; but they cannot pretend to be more than fragmentary.

Conscious Social Intent vs. Automatic Involuntariness.—There is space here for bare mention of only one such principle—the one principle regarding which the reader and the author are most likely to misunderstand each other, yet the one upon which depends much of the rest. It turns upon the idea which should form the preface to every course in political science. This idea raises the question whether revolutions, or any other social phenomena of appreciable magnitude, arise voluntarily with public opinion, in public consciousness of the result destined to follow, or whether they occur automatically and uncontrollably, according to natural laws now so little understood that *not even the educated have been able to foresee any major event of recent history.*

Repeated occasion has been found, in the preceding analysis of economic details, to point out that many of our most important economic phenomena are being determined for us by immutable laws of social balance, set going by human acts which were quite subconscious in their nature—the ultimate result being reached through intermediate energy-transformations quite as striking, in their contrasts, as those which pervade our most intricate mechanical appliances. We shall now see that these minor and unquestionable instances were but lesser embodiments of the broadest law of social evolution, namely, that *all originative social acts are quite devoid of either intent, or even foresight, as to the results inevitably to follow.*

Our whole impending social crisis, for instance, has been the work of the men who invented the steam-engine, the power-loom, the dynamo and the telephone. Yet the inevitable social fruits of these human acts no statesman nor any professor of sociological science, with many years in which to do so, has yet been able to foresee. Still less can they be attributed to any conscious intent upon the parts of these originators of trouble. Meek, modest lovers of craft and mankind! They would rather have burned their models and died unknown, had they been conscious of the burden of international war and internal discontent which they were foisting upon the world, merely by making two lives possible where only one could exist before.

It is the common, tacit assumption by virtually all educated persons that social evolution in general, and revolution in particular, is a voluntary act, promoted by agitation and guided by public opinion. Yet in support of this assumption the author can find no atom of evidence in recent history. He cannot discern, in the evolution of any war or revolution of recent centuries, any government, or political party, or school of philosophy, or even leading statesman, who either succeeded in guiding the course of events along the path which he had selected, or who was able *even to discern whither it was going of its own will.*

If the procession of events was in truth driven and guided by whim, it was other than human whim. For everywhere events led, followed only tardily by a public opinion which often had to turn somersaults overnight in order to keep in touch with them.

In all sciences, sociology included, the ability to predict necessarily precedes the ability to control. We do not find a steamship manageable unless she maneuvers as her designer predicted she should. In our recent science of meteorology, for instance, we have attained fair power of prediction; yet we wield not an atom of control, as yet, over the weather.

In the science of social energetics we possess neither the power to control nor even the ability to predict. We never know what is going to happen next, and buy hourly editions of newspapers to try to find out—with the man who buys the most papers knowing the least.

Therefore it *must* be recognized in every man's thoughts that revolutions do not come from voluntary uprisings. If they did, every one of them would have followed a course vastly different from its actual one.

So sweeping is the support of this broad statement by past history that only one apparent exception can be found. This is the revolution of 1848. But this revolution of 1848 is the one revolution of history which, in an effective sense, *was no revolution.* That is to say, it did not revolve, nor even evolve, anything. No form, nor even policy, of government was changed thereby. The revolution was easily put down by force, leaving matters for the proletariat worse than they were before.

Political Democracy and Economic Oligarchy.—Also, if the reader and the author are to derive any mutual benefit from the following chapters, it *must* be clearly recognized that attack upon the existing economic régime, which is the very antithesis of democracy, is no attack upon our American political democracy at all, but a defense of it from its direst menace.

Carved upon the rocks upon a mountain-top, near the city of the author's alma mater, still survives the motto scratched there by the regicide judges of Charles I, to whom the cave gave shelter in concealment after their flight to America: "Resistance to tyrants is obedience to God!" There is no tyranny extant to-day so hateful to God as is the desecrating power of the money-changers who have intruded into the temple of American democracy. The fact that no individual member of this tyrannous institution may be conscious of the tyranny of his collective acts, as a personal tyrant of earlier centuries would have been, has nothing to do with the iron despotism of the institution's subconscious results.

This New Year's Day of 1920 brings out two expressions of patriotic faith from officials of the American government which deserve to live. One of them, from Secretary Lane, we quote:

> "I wish that 1920 may be a Lincoln year, in which our people will learn to look at things through Lincoln's eyes—those kind, steadfast, honest eyes—in which there was neither malice nor envy, but a great sympathy in a noble common sense. Why can't we make this 1920 a Lincoln year?"

We not only can; we shall be forced to do so. But let us re-impersonate Lincoln himself, and not re-impersonate, as we are now doing, the blind, silly, cruel public of Lincoln's day. For the public of 1856-63 saw no halo around Lincoln's head, as we do. Because he dared to attack intrenched profits he was hated, misunderstood, cartooned, vilified, and finally assassinated.

There is no such educational feature as to American history in existence as the collection of Lincoln cartoons in the Congressional Library at Washington. Yet its lesson is as little heeded by Congress as it is by the run of American people who flock to Lincoln-celebrations, venerating a false idea of what he did, while crucifying every present manifestation of the Lincoln spirit which they can find daring to raise its head.

But let us not, while forgetting what the people of Lincoln's day did to Lincoln, also go astray as to what Lincoln himself did. Thus the common idea of his career, picturing his youthful trip on a flatboat to New Orleans—where he doubtless saw slavery and supposedly formed the resolution to do away with the institution as soon as he had the power, and of his deliberate accomplishment of that purpose later, when he had attained presidential authority—is largely fairy-tale. Nor is it as innocent a fabrication as are most fairly-tales, for it is leading our ideas widely astray in our present crisis.

Lincoln doubtless went to New Orleans, doubtless saw slavery, and doubtless hated it in his heart. But—knowing better than any other man what was involved—if he ever had the purpose to abolish it, he concealed the fact most carefully from his every public utterance. His famous debates with Douglas, in 1858, upon the territorial restriction of slavery's expansion, which won him the presidential nomination in 1860, certainly made no mention of it. He certainly never avowed it to the Republican party, before accepting the nomination, as he is just now being depicted upon the stage as doing. The platform upon which he was elected certainly did not avow any such a purpose.

Not only are these negative statements true. Lincoln openly, repeatedly disavowed any right or intent to touch slavery, other than to restrict its expansion into federally governed territory.

If all this had not been so, Lincoln could never have been elected president. In 1860 public opinion, which only four years before had systematically persecuted the abolitionists, was very far from tolerating abolition. It was not until Fort Sumter had been fired upon, some six months later, that Northern sentiment took a longer leap toward abolition, within a week, than it had progressed by agitation during the preceding three decades.

It was only as recently as 1856 that the North, revolting against having the uncomfortable slavery-issue thrust upon it, and led by the commercialists in protest against disruption of their profits, had elected the non-committal Buchanan, in a "safe-and-sane," "peace at any price" campaign, punctuated by anti-abolitionist mobs and the Kansas border-war over slavery, as a rebuke to the "needless agitation." Frémont, standing upon the platform of the newborn Republican party, which confined itself merely to restraining slavery from expanding into the territories under congressional rule, had been signally defeated.[1]

Four years later Lincoln, the second candidate of the widely hated "black Republican" party, was able to gain the election, however aided by advance in public opinion, only because he stood squarely for even greater self-restraint than Frémont's. He was never officially an abolitionist before he entered the White House, and not for some eighteen months thereafter.

Even as late as August, 1862, sixteen months after the opening of actual war and nearly two years after the secession of South Carolina—by which act slavery had fully shown its hand—Lincoln officially declared his duty to be the perpetuation of slavery, *if by that means he could perpetuate the Union.* Yet within another five months he had proclaimed, as a war-measure requisite for the preservation of the Union, the abolition of slavery!

Lincoln was not only wise, moderate and charitable. He was forceful. It was he more than Grant who fought the war through to "unconditional surrender." But all his wisdom, moderation, charity and force of character *did not suffice to keep us out of war*—did not succeed in forefending us from a crisis wherein, in his own words, doubt arose as to whether a government of, by and for the people might survive upon earth!

It is to guard this land against a repetition of this dire extremity, by urging a policy more prescient than Lincoln was able to command, in the crude, unscientific days of 1858, that this book is dedicated. But such prescience could never tolerate our present lazy neglect of the economic oligarchy. It calls for the same determination and energy of action *now* as we shall inevitably put forth under the stress of a tottering civilization, after it is too late to avoid extreme crisis.

All this is pertinent here because we have just reached, as this book appears, the President Buchanan stage of the evolution of our pending economic world-crisis. The mass of patriotic, but comfortable, people, now for the first time forced to take cognizance of the uncomfortable issue of economic injustice and inefficiency (heretofore recognized only by "cranks"), is determined that its luxury and its profits shall not be upset by any needless, insane, seditious agitation.

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[1] The election of Mr. Harding in 1920, as much for the repression of radical expressions of economic discontent as from hatred of Mr. Wilson's policies, is a startling parallel with the election of Buchanan in 1856.

To-day any radical view whatever, whether true or false, acts upon the public as a red rag upon a bull. The whole policy of the day is to rely upon repressing by force a discontent which, driven by expanding world-commercialism, is rising, the world over, as naturally, relentlessly and uncontrollably as the tide under the pull of the moon. The majority of all Americans wish neither to do economic justice, nor even to stop and investigate what justice requires of them. They wish merely to get back to the comfortable peace of two decades ago. Impossible!

In this perilous, pregnant situation let us indeed commit ourselves to Lincoln's policy of "malice toward none and charity toward all"; but let us never forget that Lincoln's wisdom did not, could not, keep us out of war. Slavery—for centuries approved by the Bible and tradition, and protected by the American Constitution and statute law—had reached the time when, energized by modern invention, it had grown into a huge abuse which had to be abolished, else the government must fall. But it was not merely the South which decreed, by its acts, that the method of slavery's abolition must be war. It was the lazy, greedy neglect of humanity's rights by the prosperous North which contributed equally to that lamentable fate.

To-day commercialism is playing exactly the rôle which slavery played yesterday. Energized by modern invention, it has grown into such a huge abuse that it, and not its natural child—discontent—is about to enforce its own abolition. But if we are to prevent this cataclysm it must be by doing something which Lincoln did not do, namely, *foresee and act with a determination which the North exerted only after it was too late to avoid war.*

So vastly more intricate is our modern crisis than the relatively simple one of slavery that there would be no slightest hope of our being able to do this, if it were not for the evolution, since Lincoln's day, of our schools of sociology. In 1860 there was no science of sociology to guide public opinion, nor even to predict what would happen regardless of attempts to guide. There was then scarcely a single school of natural science in the land, and none of technology. The universities were all headed by theologians. None included a department of sociology.

Yet are we any better off to-day? Where is the school which foresees, or dares to predict? Where is the group of scientific men all of whom agree even as to what is the social trouble with us to-day, let alone the more difficult question as to remedy? Where is even our modern Lincoln, who sees clearly, where other men's vision is blurred, that commercialism must not be allowed to expand further, else it will overturn the state?

We shall see, in the last chapter, that our schools of sociology are either silent, through fear, or are filled with inconsequential babblings. The Lincoln of the pending crisis is still splitting rails in obscurity. There is none to lead—merely a hysterical mob-spirit intent upon repression of all radicalism, whether right or wrong, by force.

In our perplexity such as this, is silence, while the precious days flee by toward inevitable revolution, our only patriotic policy? Or is it not treason?

CHAPTER XXIV

THE REMEDY—CONSUMERISM AND CONSUMERATION

In undertaking the prescription of a panacea for social ills it should be recalled that the preceding analysis has concerned itself only with those forces within society which may be styled huge and raw. The finer ethical influences at work in social evolution have had as yet little consideration, except to show that they are the effect, rather than the cause, of these cruder forces —that they transmit rather than create—that they are modifying rather than controlling.

Therefore it is right that this should have been our order of procedure. For, however we may enjoy basking in our self-deception as to the power of the individual will in social affairs, these grosser, subconscious forces have so far shown themselves unquestionably as the ones in control. It is they, and not some obscure, delicate, psychic reactions within the individual, which first determine the destiny of society. It is they which create public opinion—transform it, turn it inside out, or over-ride it brutally—always despotically and sometimes suddenly—as a preliminary to public action.

Ethical forces, it is true, must be relied upon by society for the rapid and delicate *transmission* of momentary social impressions throughout its frame, with the sensitiveness of electricity—and with its fleetingness, too. Indeed, electricity is an accurate parallel with public opinion; for electricity, often called "that great power," which drives our trains and lights our streets and homes, and carries our messages, is, in fact, no slightest source of power. *Every microwatt we use we have to make,* either from steam or water-power. Electricity is a mere *transmitter* of energy derived from other, and far more sordid, sources.

So is public opinion. It never created a single social force, although it has transmitted many. Its surging pulses have always been subconscious reactions to a train of events, controlled automatically by natural laws which we are now engaged in tracing.

Therefore all of which we may be sure, in the face of our present crisis, is that, after the reform of present ills shall have been fully effected—after the smoke of revolution shall have drifted away—then the conformation of society which alone will have been able to survive the many shocks and counter-shocks, as that most permanently stable, will prove to be, not one in consonance with any of the rapidly shifting hues of current public opinion, which now puzzle us with their phantasmagoria, but instead, with those huge, raw, relentless, natural forces just mentioned. Unconscious of their domination, and proud of our supposed free sovereignty over our social life, we may pretend to be; yet their furthest brutal demand must be met before any of the finer sensibilities of modern society may find play. Yet it will be the highest aim of this book to show that behind all this apparent brutality of natural economic law is a loving intelligence, always rewarding co-operation and unselfishness with success, and dooming selfish antagonism to failure.

Therefore, when we attempt to predict, and to offer remedies for what we foresee, we must pay first attention to these all-powerful underlying crudities. Before we may drape the gross nakedness of the real social vitalities with a veil of art, literature, ethics or religion it is necessary to study well their posed nudity, and to consider well the underlying rigidity of bone and bulging brutality of muscle.

Thus the society which we might mold synthetically, directly from a study of these raw anatomies, may correspondingly have the appearance of a community of grotesque, cyclopean giants, it is true. It may resemble a tribe of huge manikins whose wires receive their impulses from a modern power-house, rather than a civilized and cultured state. But it will at least possess the primary virtue of fidelity to natural law, of unlimited power and stability, and of justification in actual practice, rather than the impotence and irresponsibility of those vaporings which base themselves upon momentary conscious public opinion, national character, racial tendencies, psychic reactions, esthetic ideals, or the like—and then never come true.

It may, indeed, the better make clear to us how it is that modern society, even in its most cultured portions, where art and ethics have received most careful nurture, should at times break forth into whirlwinds of blind and brutal cruelty, surpassing that of the savage—or worse, that of a relentless automaton, driven by forces which we can neither see nor understand, as implacable as a machine in motion. Our synthetic studies may resemble the army of Goths invading Rome—crude and vigorous, destroying many delicate fabrics of cherished tradition, and false if beautiful ideals; but bearing in its wholesome freedom from cant and superstition the seed of a social destiny far higher than Rome knew how to dream.

Political Democracy.—It is now almost exactly one hundred and forty years—more than four generations of men—since the founders of this nation enunciated to the astonished world a basic principle of political organization which was then regarded by all the orthodox philosophers and pillars of government (chiefly in Europe) as novel, fantastic, foolish and dangerous in the extreme. To their minds it was radicalism carried to the *n*th degree. It was accorded the death-sentence, so that our colonial fathers grimly jested: "If we don't hang together we shall all hang separately."

Yet this principle was the one, in fact, upon which the Goths and Vandals had fought their way into Rome, upon which the Saxons had invaded Britain, upon which the barons had forced the hand of King John, upon which the privateers of Queen Elizabeth's day had driven Spanish tyranny from the high seas, and upon which the Puritans overcame that most unrelenting enemy of all, New England's soil and climate—compared with which King George's troops were easy. But never before 1776 had this principle been enunciated broadly, consciously and deliberately, as a rule upon which to base the design of a government in stability and liberty. This principle was that *the only just and equitable power of political government springs from the consent of the governed.*

After these one hundred and forty years of experience since then with a government so founded, its citizens have no doubt as to the proof of the formula. We have seen France copy our lead in 1793, and again in the nineteenth century, and have watched that country thrive thereon from one of the most unstable and oppressed to one of the freest and best balanced of nations. We have seen the principle justify itself in our own internal struggle of sixty years ago, centering at Gettysburg, which called forth Lincoln's immortal characterization of the Civil War in terms of that principle.

We are now witnessing the fate of a nation and a civilization, the German, which, the most efficient upon earth in some respects, has yet gone wildly astray in a horribly inefficient blunder (to put it cold-bloodedly) because it had failed to adopt that principle at the proper time, in a baptism in its own blood, as we did in 1776 and as France did in 1793. So it must do so now, with shame added to agony as the price of its delay.

Almost one hundred and fifty years of fighting have been required to establish beyond question that principle announced in 1776. We had thought that the revolution of that year in America, and that of some thirteen years later in France, had sufficed to settle its extension over all the territory of a nation; but we found our error in this in 1861.

We then thought that our Civil War had extended it over all races in America. We did not then realize that there yet remained a still larger fight—to extend it over all continents and countries therein. For we live to-day in a *de facto* world-community, and the only community which can survive to-day is a democratic one.

Economic Democracy.—Yet now again (supposing the Great War finished) there arises before this nation of ours, the United States, the world's leader in commercialism—or arises before that greater world-democracy which may be born of the Great War—the duty of again enunciating this principle. But this time it is to extend its application into a new, a still more advanced field—a field far beyond the political field, even when spanning oceans—a field as far in advance of that now formally recognized for it as the American Revolutionary doctrines of political democracy were in advance of European public opinion of that day. This field of democracy now in question is that of *economics,* covering every conceivable question of industry, commodities, interchange and service.

For in that field the *Ultimate Consumer* occupies the same position of natural sovereignty and inborn authority that the *Voter* occupies in the political field. In economics the purchase made by the Ultimate Consumer is his vote, whereby he registers his individual will as to matters economic—and by which he simultaneously contributes his quota of support to the economic nation—just as his political vote registers his will as to matters politic, and enrolls him for service in support of the political nation.

Therefore we must somehow attain, at whatever cost, a formal recognition in our constitutional law of this basic principle that: *In the economic field the Ultimate Consumer is Sovereign and Proprietor.* We must somehow incorporate into our institutions the fact that the sole justice back of these huge, crude, governing powers which find expression in retail prices, quantities of commodities, facility of communication, wages, volume of employment, and industrial organization—defying as yet our every effort at their control—rest squarely upon *the consent and desire of him who supplies all economic power in the raw, and whose mandate across the shop-counter as to what he will or will not consume must always stand as the ultimate, despotic authority over all industry and all interchange—the Ultimate Consumer.*

Economic Taxation without Representation.—It must be announced (as a preliminary to its enforcement) that taxation without representation is as intolerable in economic as it is in political fields. The patriotism of American citizens will no more endure permanently the imposition of higher and higher prices, and the collection of unearned tribute in the form of rent, interest, dividends, profits and surplus, by authorities in which he shares no representative power, than it did the same species of tyranny when imposed by King George III. In neither case is the development of revolt immediate; but in neither case is it *voluntary.* In each case it is inevitable.

Economic Elective Liberty.—The free selection of goods or service by the Ultimate Consumer, without any interference due directly or indirectly to ownership-in-industry, must be protected by society with the same diligence and dignity as the freedom and purity of the ballot is now protected. Complete freedom, assured through unquestioned authority and unlimited power, must accompany each of these parallel acts—*the ballot and the purchase*—else liberty and democracy totter in either case.

Post-War Problems.—After the Great War social problems will press upon us increasingly. Even now internal forces promise to outrank international ones in the settlement of peace. But when we analyze these social problems carefully it appears that they are all traceable, more or less directly, to a gradual, but continuous and accelerating, departure of our national life from this duty of maintaining, in the field of economics, this only correct principle of individual sovereignty, liberty and power of the Ultimate Consumer.

For formerly, when the Consumer produced with his own hands the bulk of what he consumed, or traded only with his immediate neighbors, he was still sovereign over all industry which affected him personally, in nature's simple stateliness of fact. But now that thousands of miles of territory, an intricate array of both middlemen and middle-industries, and the whole weight of commercial and financial credit-organizations besides, intervene between him and the producer of what he consumes, he has become as helpless as a serf to a feudal lord. Economic society, lacking the wholesome, natural and stabilizing influence of the millions, has become a sheer autocracy—as unmitigated an autocracy as any in history, and greater than any since the world-autocracy of Rome.

For that reason it is running wild to-day in America, just as French autocracy ran wild previously to 1789, just as our slave-owning autocracy of 1840 ran wild up to 1861, and just as German military autocracy has run wild until checked by the present war. There is every sign that after the war is over our commercial autocracy—which has received therefrom a lengthened leash in the form of hundreds of billions of additional credit, and a stimulated international trade—will run still more wild than before.

Since in magnitudes of energy involved our present commercial autocracy far exceeds any of these autocracies of the past, not excluding even that of Rome, there is every prospect that its collapse—inevitable soon, unless adequate measures intervene—will bring a more horrid reaction into temporary anarchy than has followed any of these. At least, it will spread itself over a larger area and population.

Yet all that was ever needed, in order to check any of these earlier autocracies before they had developed into world-horrors, was, in the first place, their *prediction;* and then, as the result of that, the return to the millions of their temporarily usurped sovereignty, by the prompt organization of a truly democratic form of government.

Economic Preparedness.—In our present economic autocracy the situation is the same. If we, now citizens of the largest unitary economic community which history has ever recorded, are to avoid another impending world-horror more gigantic than any which have preceded, then *we must embody immediately in our economic organization the natural sovereignty of the hundreds of millions of Ultimate Consumers, over all matters industrial and commercial, in a carefully designed economic democracy.*

This we already possess full right and equity to do. For at all previous periods the Consumer has been paying (if on a smaller scale) what he is paying to-day, namely, *every conceivable industrial and commercial cost—proper or improper—wages, raw material, profits, interest, rent, dividends, selling-costs, graft, adulteration, and finally surplus.* Hence it has now come to pass that *he is now furnishing, and for some time past has furnished, all capitalism.*

Therefore there does not now exist in the economic field any atom of physical plant, nor any scrap of paper security, *which is not already his, in equity, by right of past purchase for cash, paid down in advance across the shop-counter.* There is not a share of stock, a bond, a note nor a mortgage which would be in negotiable existence to-day, except as his property, had he always had preserved to him his sovereign right to say how and where his own money should be spent. There has never been a time when he did not have the fullest birth-right, however he may have lacked the legal power, for saying how every penny of his annual multi-billions of expenditure should be invested, throughout every nook and corner of the industro-commercial system.

As noted repeatedly above, it is not the business of this book to advocate confiscation, nor any other over-drastic method. It is not even its function to dictate *any* method of procedure for securing re-expression of this popular birthright which has been temporarily lost. That is a question fit to tax the ablest administrative heads which the present generation of men may produce. The author's function is merely that of the conscientious student, intent upon supplying said administrative men with accurate and adequate facts upon which they may base their decisions.

It is our first duty, in the exercise of this function, to record the historical fact that this natural birthright of the Ultimate Consumer has always existed, but that its effective expression has gradually been lost to the people.

The second historical fact to be recorded is that *man possesses no free will to choose whether he will regain such an inborn right or not.* He has no more to say as to such recoveries of social equilibrium than he has as to the balance always maintained by nature between the sexes, for instances, after the males have been decimated by war. This right *must* be regained, either by reason or by force of automatic cataclysm. The human will has power only to choose between these two methods.

As the decades have passed, the people have allowed this birthright, through no greater sin than neglect in the face of changing conditions, to slip from their hands. It is in this gradual loss that our civilization has been becoming steadily poorer—in poise and contentedness, where not in money. Gradually our noble body economic, having lost its wholesome contact with soil, labor and reward, has gone partially insane. It has already begun to clutch at gravel-stones for food, while surrounded by a garden of plenty—clawing murderously at its own vitals with frenzied, unshorn finger-nails, because it is hungry and can see no food to satisfy—no opportunity to labor in a world needing endless labor.

Nor, in saying these things, is reference had only to the nominally poor. All of us have suffered; and in some ways the rich, and certainly the impecunious cultivated, have suffered most.

Economic Shrewdness.—Thus Mr. Rockefeller has been reported as being a billionaire. Yet will anyone contend for an instant that Mr. Rockefeller, in amassing his oil-properties, *while at the same time abandoning, as he has done, his own proper share in the ownership, control and enjoyment of every other industrial, commercial and technical property in the land —which is rightfully his in his rôle of Sovereign Consumer—has made anything else than an almighty poor bargain?*

Mr. Rockefeller is not nearly so shrewd as he is credited with being. The man who would consciously sell out all this birthright for a paltry billion would be an utter fool. For his entire billion, even if he could expend it all at once, could never buy him what the lost share in economic democracy would have brought him—peace, the fullest opportunity for the exertion of the best that is in him, *the fullest reward with the value of all which he had produced,* the respect of the community, the certainty of comfort in old age, the consciousness of never having overstepped the equities toward his fellowmen, and *reliance upon a stable society in which to grow old*—not to mention a tremendous supply of novel, purchasable comforts which one cannot now get on the market at all.

And, if rumor is to be trusted, Mr. Rockefeller, unconscious as he must be of the details of his bad bargain as set forth in this book, is none the less suffering keenly from its fruits. Yet he is now too old to reconsider his course in life. But the younger businessmen still have a chance to debate whether their daily success in business is not, after all, the most losing game they could play.

Consumerism.—To the doctrine which advocates the assertion by the Ultimate Consumer of these his basic rights, namely, to control by ownership acquired through *economic* as contrasted with *political* processes, every feature of those huge economic forces which he himself has set into motion, by his own good money—yet which now govern him tyrannically, relentlessly and invisibly—may be given the name *consumerism.*

For this doctrine a new word is inevitable. There is no existing word for expressing it.

The word co-operation may occur to some as proper; but the word co-operation, like socialism, nationalism and several others, has already been given such a wide variety of uses as to have ruined utterly its accuracy of significance in any one of them. Thus the term co-operation is used frequently to include combinations of producers. Yet a prime aim in the term consumerism is to exclude specifically the producers from participation in organized economic sovereignty. The producers *as Consumers* are of course to be assured their proper authority. But as producers they are properly slaves to themselves or others for whom, as Consumers, they may produce.

Although the idea back of the term consumerism does not exclude the maintenance of trades-unions, as an incidental means for the unified expression of opinion of masses of workingmen, as to things which affect all of them, yet the remedy for such common injustices as this may reveal *must* be accomplished through the activities of these same workingmen in their rôle of Consumer.

Thus the author is now a member of his own national, professional organization, pledged to the advancement of that profession. But the last thing with which this organization should, or does, busy itself is the improvement of the *economic status* of its members, relatively to other professions.

The same applies to the machinists, bricklayers, etc. If all of them could appreciate the truth that all their unionism, strikes, etc., better their condition *only at the expense of other trades of workingmen,* their enterprise would soon alter its aims. It is only as Ultimate Consumers that any of us can ameliorate our economic condition without making that of our fellow-citizens worse.

To the common statement of the orthodox socialists and trades-unionists that, under the reformed society which they seek in the name of the producers, all will be such, there is opposed here the broader statement that, under a properly reformed society, *all will equally be Consumers.* More, that *even to-day all are already Consumers.*

For one of the heavy indictments against socialism, as a practicable program, is that it plans to found society upon a basis which can exist *only after the revolution has been completed*—and such changes require years for their accomplishment. It is planning to build a bridge to a happier land out of materials all of which *lie collected upon the opposite bank of the river.*

Because, under even the most ideally reformed society, not all can be producers, yet to-day all are Consumers—and throughout all the anarchy of interregnum between the old and the new will continue to be Consumers—this plan of governing through the Consumer, rather than through the producer, is urged as obviously more practicable, more democratic, more humane and more just.

Postponing more detailed argument until later, it is an axiom in the premises that this is the proper line of procedure, because it is the taste of the Consumer, expressed from instant to instant across the shop-counter, which must guide all industry. Without this guidance a factory of ten thousand skilled workmen, say, working industriously through three hundred ten-hour days per year, would yet have "produced" nothing but rubbish, because no one would buy it. They would have ceased to be producers at all, however regularly they might draw their wages. *They would be impoverishing the purchasing-power of every real producer in the land.*

The word co-operation has also been used to include almost every conceivable degree of commercialism. The average so-called co-operative society is merely an enlarged commercial firm, run solely for the benefit of the firm-members, rather than for the community as a whole. Indeed, some nominally co-operative enterprises are undisguised in their commercialism, making large profits and declaring dividends as unblushingly as any other corporation.

Socialism.—Any suggestion for the use of the word socialism, for the new policy advocated under the name consumerism, will raise a storm of debate as to just what the term socialism may mean. As the author understands it, consumerism is diametrically contrasted with socialism; but the latter word, particularly when printed with a small *s*, covers so wide a range of opinion, loosely including many degrees of antagonism to divers aspects of commercialism, that it becomes necessary to investigate.

But as to orthodox socialism, with a capital *S*, there can be no doubt as to its meaning something very different from consumerism. For there, as the original authority, stands Karl Marx's "Das Kapital," the bible of the orthodox socialists, with many modernizations by more recent writers who do not alter its essentials. Then there is, in this country, the Rand School, of New York City, which is everywhere recognized as orthodox and the literature of which is full.

Finally, for this country also, there is the Intercollegiate Socialist Society, representing the brains of the movement and having chapters at almost every university and college in the land. The list of members of university-faculties printed upon the letter-head of this organization forms an imposing array of representative intellectual authority.

The sessions of the New York City, or central, chapter of this last organization the author attended with religious regularity for four winters, from 1910 to 1914, in order to acquaint himself with American socialistic belief in its most enlightened form. As a member of the organization he received all of its printed circulars.

He has been in public debate at the Rand School with Mr. Hillquit, who, as candidate for the mayoralty of New York in 1917, polled the heaviest socialist vote ever cast. He has been in private discussion with Mr. Benson, socialist candidate for president in 1915, Mr. Phelps-Stokes, former president of the Intercollegiates, Mr. John Spargo, and others whose prominence in that Society gives color to its doctrines. He has lectured before the classes of several of the professors whose names appear upon the Intercollegiate letterhead.

For nearly thirty years he voted the ticket of the Socialist Party—not as a member of that organization, for even in the enthusiasm of youth he could not bring himself to subscribe to its basic principles—but as the only way then available for recording a public protest against commercialism. For he always sympathized with its general aim—antagonism to commercialism—and until recently believed that it might be transformed gradually into a wise, competent, American crusade against that most autocratic and unamerican of all institutions—commercialism.

For all these reasons he believes that he can speak fairly and competently as to what socialism, orthodox or intellectual, may be. He believes that his own outline of what socialism really is (given below) will be more accurately instructive to the reader than could be any literal quotation from the publications of any one branch of the movement.

It happens that several of the most prominent members of the Socialist Party have recently resigned therefrom, publicly announcing their repudiation of its alleged pro-Germanism and its indubitable pacifism. Whether these deserters are still to be called orthodox or not is hard to say. Apparently they are still orthodox as to economic doctrines, while recoiling from the political views which (it is believed here) are the inevitable sequel to the economic errors of socialism.

These renegades have just helped to form a new socialist-progressive-prohibition-single-tax coalition-party, called the National Party; but whether they regard this as being a truly socialistic party or not, one cannot say. It is enough to note that, whatever they may call it, its platform, so far as it carries specific economic planks relating to the distribution of wealth, upholds the same economic views which I found so unshakably lodged within these persons during my four years of contact with them. These views are stated systematically below.

All this array of personal authority for public views has been introduced here because it is exceedingly difficult, if not impossible, to pin so diversified a movement as that of socialism in America down to any particular utterance as official. There is none such which might be cited here which would not immediately be repudiated by large numbers of "socialists" —not necessarily because they disagreed with its general tenets, but because it had been put forth by some other branch of the movement than their own, and might differ in detail from their own views.

For American socialism is largely an uncrystallized thing. It is a most significant fact, although not widely known, that for years not over one-tenth of the vote cast for the socialist ticket was from persons enrolled as members of the Socialist Party. For the Socialist is the only party in American politics which has always fortified itself against any possible modification of its basic tenets, to keep in touch with the progress of the times, *by enforcing subscription to its fixed doctrines as a prerequisite to entrance into membership.*

Therefore the author sought acquaintance with the movement as a whole, and particularly with the Intercollegiates, as being the best informed, in order that he might form competent conclusions of his own as to what are the essentials of the socialist movement. He believes that the statement of these essentials appearing below runs no slightest danger of being misrepresentative.

If any appreciable branch of the organized socialist movement will officially repudiate the allegations embodied in these tenets ascribed below to socialism, the act will be as welcome as it is surprising. But no mere verbal repudiation will suffice. The repudiation, if consistent and sincere, must take the form of a *fundamental alteration of policies and affiliations.*

All trades-unionism, so far as it concerns itself with the elevation of the wage, must be discouraged. All strikes for higher wages must be denounced. Subscription to the tenets pre-requisite to membership in the Socialist Party must be renounced. The use of *any* such pre-requisites must be condemned, as an unamerican paralysis of party-growth by subservience to a fixed minority.

Further, the Rand School must be actively opposed, as a burden to the poor and a menace to the government. The views set forth by the bulk of the books now actively circulated by the Intercollegiate Society must be publicly denounced.[1]

For the progress of events has now brought us to the inevitable parting of the ways. The time has come when those serious-minded people whose hearts lead them into opposition to commercialism have become particular as to just what economic doctrine they are to offer in substitute therefor. If the intellectual socialists cannot see this, there are others who can.

Incidentally to his efforts at the identification of socialism, the author tried earnestly to bend the views he met among the Intercollegiates toward those set forth in this book, as constituting a rational and patriotic school of American opposition to commercial autocracy—yet without giving his doctrine any name. Overlooking the many errors in orthodox socialism, he sought to have these broader views included within the scope of the term socialism, and to have all questions referred to some scientific study of history, in order that the socialistic movement might be diverted gradually into truer channels—while leaving unaltered that unrelenting antagonism to commercialism, as a system, which is the base of all socialistic thought.

But in all this his failure was signal and complete. Everywhere in socialistic circles dogma rules. Except with a few individuals, the atmosphere grew increasingly hostile to his efforts. In the four winters of monthly or fortnightly meetings *he failed to secure the assignment of even one of them to a study of the French Revolution, that illuminative primer of history to every person advocating radical reforms.*

If it be replied to this that the Intercollegiate Society has no official set of principles, but stands merely for the dissemination of literature and the organization of chapters in colleges, the counter-statement is, in effect, that its whole function amounts to such a standardization; *for the very dissemination of doctrines standardizes them.* The Society cannot continue to organize undergraduate students, placing in their hands lists of books to be read, without making itself

[1] These lines were written some two years before the federal government's procedure against the Rand School in June, 1919.

deeply responsible for the views which those young people are to imbibe from these books, and with which they will leave college and enter our national life. It thereby becomes responsible for our every national act during the near future, when these young people shall have become the most active stratum of that most responsible of all our layers of democracy —the educated.

Moreover, the Intercollegiates have incorporated into the name of their society the word Socialist. They maintain an active, if informal, co-operation with the Rand School, regarding whose doctrines there can be no doubt. In all these ways they countenance, standardize and actively disseminate definite views such that every citizen-patriot, for reasons stated below, should oppose them in every proper way.

For these views not only encourage, they make inevitable, the climax of that bitter "class-struggle" which is destined shortly to cost the working-classes millions of lives, and to shake civilization to its very foundations. Yet this will occur without any permanent enthronement of socialistic institutions.

It is the erroneous economic philosophy of orthodox Socialism to which is due its growing popularity, in that it promises prompt and easy economic relief. To this is due also its peace-at-any-price sentiment in international matters, its class-struggle, war-at-any-price, sabotale and bolshevist tendencies at home, and hence its ultimate failure. It is this erroneous economic doctrine which is being actively circulated by the Intercollegiates.

For them to say: "We do not approve of violent measures" is childish. Any belief in victory for either side, in the "class-struggle," makes exhaustive violence certain. *Any error in the fundamentals of political economy, whether as to feudalism, slavery or wages, makes violence inevitable.* It is a vital matter to be correct in political economy.

American Socialism.—The entire socialistic movement in America, whether following the narrow, rigid, bigoted path of the orthodox Socialists or the slightly broader outlook of the intellectual Intercollegiates, is thoroughly united, *so far as economic philosophy is concerned,* upon a well-defined platform to which it adheres tenaciously. In this philosophy the intellectuals are apparently just as hostile to innovation as are their less educated brethren. All socialistic doctrine in

America, in whichever camp, or however differing in detail, unites in a basic faith that:

(1) Production is the process carried on by wage-earners in factories, the terms producer and wage-earner being practically synonymous.

(2) The source of the hardship of the poor is the competitive wage-system, because it involves *the retention of the wage-earner's "surplus value" by the employer.*

(3) Therefore the distinction between oppressor and oppressed (or "exploited") is a personal one, *demarked between wage-payer and wage-earner.*

(4) It is, therefore, only the wage-earning poor who are suffering undeserved hardship. The petty tradesman, who is often the most bitterly pinched of all, is getting (they say), as a hated "bourgeois," only what he deserves.

(5) The responsibility for the presence, the injustice and the hardship of this system rests (they say) *upon the employer or capitalistic class,* because

(6) The power is vested within this class to end this unjust exploitation by the granting of a higher wage whenever it will. Indeed, it is one of the most fundamental of all socialistic beliefs that

(7) *The remedy for all economic hardship lies in the elevation of the wage.*[2]

(8) The fountain of wealth from which the wage-earner is to draw this comforting elevation of the effective wage is the riches of the employer-class.

[2] The author has been dared by Mr. Hillquit, in public debate, to suggest so silly an idea as that the working-people should actually advocate a lower wage. Yet that, in effect, was exactly what the author was trying to make clear to his audience, as he has tried to make clear to every socialist he ever met, namely, that only when the working-classes (without necessarily trying to force wages down) *stop trying to force wages up,* and spend their energies, instead, in organizing themselves upon such a plan (as Ultimate Consumers) that incidentally prices and wages will be brought down together—and prices very much faster than wages—then, for the first time in the history of labor-agitation, they will be doing something which brings them immediately and permanently a larger supply of food and clothing for a given amount of exertion, and a greater continuity of employment.

To guide these blind and bitter millions into this narrow pathway of real advance, not easily to be discerned, is the responsibility now resting heavily upon the intellectual socialist and the professors of political economy.

(9) The method of securing this elevation of the wage, and depletion of the employer, is pressure exerted upon the employer by means of unions, strikes, legislation, etc., whereby he, acting either as a free agent or under duress of law, is to cure all economic ills by disgorging some of his wealth and power.

(10) The only practicable policy for setting this method into operation (they believe) is *the furtherance of the class-struggle.* (The author is aware that the socialists disclaim all responsibility for the existence of the class-struggle, and desire its continuation no longer than may be necessary *to attain victory.* All that consumerism alleges against them, as their error, is their reliance upon some such a victory, in a contest between two fractions of the country, for their salvation.)

(11) This struggle for a better wage has already extracted wealth from the employer-class in the past (they believe), and is doing so now—else certainly they would not continue it. Also that, while labor is far from having attained all its rights in this respect, yet that the immediate returns, even if unsatisfactory, encourage to further effort.

(12) Hence they believe that gradual, if slow, progress is being made toward an ultimate economic situation in which no surplus-value will be deducted from the wage, in a dissolving view of the employer-class gradually melting into wage-earners, with the competitive wage-system gone forever.

(13) They believe that this class-struggle policy may be forwarded by political action.

(14) They believe that unemployment may be remedied by public works, and by a forced reduction in the time or rate of labor on the part of those already employed.

(15) They naturally believe in a legislated minimum wage.

(16) From all of the above they believe that the form of society destined to emerge from this inevitable conflict will be one attained by voluntary action, perhaps promoted by a "general strike" and perhaps aided by sabotage, but in any event *one resting at base upon the international organization of those who are now wage-earners into an economic democracy built upon the sovereignty of the producer.*

There is also to be added to this list of indictments of socialism two negative charges, concerning sins of omission from their philosophy. These important omissions are:

(17) They make, in their whole broad plan and in all their diverse literature, no mention of any adequate system of *economic credit.* There is no slightest sign of their ever having grasped the vital necessity of credit as a factor in the production of life-support for the Ultimate Consumer.

(18) They similarly fail, although they do not omit so completely, to make adequate allowance for the modern problem of *distribution*—not in its sense of physical transportation and subdivision of commodities, but in that huge and intricate problem, fast becoming unsolvable by either capital or labor, involved in the *identification,* among the vast populations now becoming accessible to each given source of supply, of that particular Ultimate Consumer whose life may be supported thereby. They fail to recognize that production has not been accomplished until each commodity has been placed in the hands of the only person who can consume it usefully, *because he is the only person who wants that particular thing and doesn't want other things.*

All of these tenets except the thirteenth (which is not universally a socialistic belief, although necessarily a doctrine of the Socialist Party) become inevitable conclusions as soon as the earlier economic tenets are granted. But these earlier tenets have already been denied, in effect, in these pages, as not being supported by any facts of political economy unearthed in a careful, unbiased search—a search made, indeed, in a spirit which, if partial at all, leaned toward socialism; for the author voted the socialist ticket for many years, as the only means then available for protest against commercialism. But never, even in the callow enthusiasm of youth, could he join the Socialist Party. The entire tenor of its principles repelled him.

These earlier and more basic of the socialist tenets being once denied, each and all of the later ones resting thereon must be specifically denied, from the standpoint of Consumerism.

Consumerism versus Socialism.—To each and all of these socialistic tenets the doctrines of consumerism are diametrically and irreconcilably opposed. There is no possibility of any compromise, nor of convergence, nor even of temporary coalition, between the two. According to consumerism, the greatest philosophic enemy of civilization is commercialism; but only second to this is socialism.

He who advocates any of the above tenets of socialism does not facilitate thereby the attainment of true economic democracy, merely because he agrees with Consumerism in attacking capitalism. Instead, he makes our progress toward economic liberty more difficult and slow, more costly in human effort and misery, more cataclysmic in its nature, and more dangerous to that national and international stability upon which the welfare of the masses rests so vitally. He is daily welding more firmly upon the workingman his existing shackles, of insufficient purchasing-power and uncertainty of employment. He has enforced upon society a more drastic and painful convulsion before they can be cut away.

The specific reasons why Consumerism is so diametrically opposed to each and all of these basic tenets of socialism are stated in the following numbered paragraphs. As these numbered tenets of Consumerism are arranged in parallel with the correspondingly numbered tenets of socialism listed above, they can be read intelligibly only by a seriatim comparison, back and forth, between the two sets of paragraphs.

(1) Consumerism does not recognize production as completed by the wage-earning factory-producer, nor at the factory-door, even when transportation is included as a part of the factory-system. Consumerism refuses to recognize production as complete even when to the wage-paid factory-operations, in their present sense, are added the salaried offices of superintendence and the function of transportation. Consumerism insists that all of these functions may have been performed with industry and skill, yet the result will be sheer rubbish, worth nothing for community life-support, *until that particular Ultimate Consumer who can and will absorb it usefully has been identified.* This identification is the most difficult and costly of all the steps of production, and is rapidly growing more so. It is now performed, it is true, in a most cumbrous and costly way; yet even to-day it determines, nevertheless, which factory shall run and which one stop, which one pay high wages and which one discharge its help, which commodity be rushed on overtime work and which one sold off at a loss. The socialist far underestimates the economic importance and power of the despised "bourgeoisie" class of petty trades-people.

When this deficit in the socialist program was brought to the attention of Mr. Hillquit he tossed it aside with a contemptuous: "Well, then, the producers will organize that also." But how would that be possible? He quite failed to see that any such an economic system, organized from that end, would be absurd and inoperative. Under any such a system, when a customer entered a food-shop and asked for poultry he would be told that only beef was being supplied that day; while in the dry-goods, hardware and other stores similarly autocratic dictums would be handed out.

While these illustrations may seem to have been made maliciously absurd, yet they are not so. We are to-day frequently told that we cannot have sugar, or urban transportation, or coal, etc., and that we must satisfy ourselves with canned tomatoes instead, with a tyranny which would be maddening to the point of instant revolt if the people only knew against whom to revolt.

In the present case no one has maliciously planned such a tyrannous result. It has occurred simply because our economic organization has been almost totally neglected, or even thrown deliberately into chaos, by its being erroneously based upon the sacredness of ownership-in-industry, quite ignoring the sovereignty of the Ultimate Consumer. But any organization based upon the producer as supposed sovereign will be equally erroneous, and will result in a tyranny equally absurd. *The economic tyranny under which we now suffer is due to its control by those who, if anything useful, are producers rather than Consumers.*

Then the man in the food-shop will force the buyer to take beef instead of poultry simply because he has beef and has no poultry; and this will be the state of affairs merely because any organization built upon the producer necessarily can give but a deaf and clumsy ear to the demands of the Ultimate Consumer. When it has mistakenly made more of this, that or the other commodity than is wanted, it will insist that it has done its part, and that the stuff must be consumed.

In contrast with this, the organization of all industry upon the sovereignty of the Ultimate Consumer will automatically avoid all such blunders, inefficiencies and injustices, because its arrangement will be primarily for the prompt, delicate and accurate transmission to the producer of the demands of the Ultimate Consumer himself. This difficult task (to-day an impossible one) once having been accomplished, it is relatively easy matter for the factories to produce what is wanted.

Then the wage-earning producer will enjoy just as much sovereignty—far more, indeed—than under socialism, because he is just as continually an Ultimate Consumer as he is a producer. Choice between socialism and consumerism is not a question of relative numbers, nor of clashing class-interests, at all, because *under both systems, socialism and consumerism, all will be producers and all Ultimate Consumers.* It is solely a question as to when and where economic sovereignty is properly to be asserted, in order to attain that most elusive goal, economic democracy—whether *when one works or when one buys.*

(2) Consumerism does not recognize the wage, nor the competitive-wage system, as the source of hardship. This is not because the purchasing-power of the present wage is regarded as sufficient, but because *its deficiencies are due neither to the fact that it is a wage, nor to the fact that its amount is determined competitively.* They are due solely to the fact that, in order to obtain life-support, *it has to be expended through a mob of competing, profit-seeking sellers.*

For the rivalry of the latter is commercial competition, which is always destructive of prosperity for all. But the rivalry of producers, in contrast, is emulation; and that is always enriching to all.

The avowed program of the socialists to make all active people wage-earners, in effect if not in name, should be regarded by them as proof of the innocence of the wage-system. They should be able to see—or the intellectual Intercollegiates certainly should, even if their less fortunately educated comrades may not be expected to discern—that, if they are starting out to make wage-earning the universal and dominant plan, *they cannot begin effectively by denouncing that system as basically wrong.*

Consumerism also starts out to make wage-earning universal, although it distinctly disclaims any idea of making it dominant. Therefore it starts out by saying that the competitive wage-system is all right, not only in principle but in present practice, so far as it is permitted natural play by commercialism—which is not very far—and that it is not in any slightest degree responsible for the existing hardship of the wage-earners. For it is not the low wage, but the *high price,* which is impoverishing and exasperating us all to-day; and the competitive wage-system is in no wise responsible for high prices.

This impoverishment of all by high prices is then explained by consumerism as being due not to any particular form or system of payment, nor to the relation of wage-earner to wage-payer, *but to the character of the thing done for the wage or other income.* For many wage-earners are now actively engaged in, and are economically if not morally or consciously responsible for, the impoverishment of their own class—of themselves, indeed.

For every man who does a useless or antagonistic thing, or helps anyone else do such, is impoverishing himself and every other person. The fact that his income happens to be in the form of a wage, even an insufficient wage, has no influence over the effects of his acts. Instances of such are the scrub-women in office-buildings, and nearly all stenographers, book-keepers, journeymen-printers, etc., wherever they are occupied in helping commercialists make money.

All this being true, it must be evident that *no degree of acceptance of socialistic doctrine by those now not subscribing to it—even to the point of all employers becoming wage-earners beside their workmen—could remedy the sufferings of the poor.* So long as every sale is free to be fought over by a mob of competing salesmen, all wages will still be paid in twenty-cent dollars, as now, and those dollars will be rapidly becoming eighteen-cent dollars, as now.[3]

[3] The present situation in Russia, under bolshevist or soviet rule, may throw some light upon this aspect of the problem. The New York *Times* for August 16, 1918, translates from the *Russkoye Slovo* an article by Mr. Alexander Boublikoff, a "prominent Russian economist and former commissionaire of the Duma," in which appears the following:

> "Mr. Boublikoff declares that the actual demoralization of Russia's economic strength began with the demand that factory-owners give up their dividends to the workingmen, who were suffering because of the high cost of living. But inasmuch as it was found that the whole sum of the dividends, when divided among the masses, would provide only a scant sum for each head of the population, attempts began to be made to expropriate that part of the business-income which did not constitute the dividends, but laid aside for all kinds of reserve-funds intended for the renewal of machinery, for building-up

(3) *No personal distinction whatever between economic oppressor and oppressed is possible.* As explained above, the line must be drawn, instead, between productive or enriching, and destructive or impoverishing, *activities;* and each individual in the land embodies some of both sorts.

Because there exist no statistical data bearing directly upon a classification of activities, we were forced, in our analysis supporting the doctrine of consumerism, to assort the data concerning occupations in terms of the numbers of individuals pursuing them. But at every point it was emphasized that this method was too personal and drastic for final truth, since every individual's occupation comprised some of each sort of activity. Also, that those who were guilty of destructive activities were, in the main, unconscious of their guilt.

(4) The problem is one far deeper than that of saving

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purposes, and under the existing circumstances for the demobilization of industry that would have to come after the war.''

American socialists may refuse to accept this statement because of its source. They need not do so. Let them merely apply this idea to American statistics. They will find the aggregate of current dividends, when distributed, quite inadequate to relieve the workingman from hardship under prevailing prices. They will then realize that the distribution of dividends did not, and could not, affect by a penny (except momentarily) that continual elevation of prices which is the workingman's real hardship.

The Intercollegiates, who have never directed their brains toward any economic analysis so onerous as this, should be able to teach their less fortunate comrades that, just because dividends happen to be wrong, that is no proof that *transferring* them cures that wrong. Not until they naturally cease to exist will the workingman be freed.

The secret of whatever success soviet Russia may have attained lies in the fact that in Russia agriculture is of far greater relative importance than technical industry; and the soviets have *nationalized the land.* Land will endure this process, because it is a tangible, indestructible thing. It will endure transfer.

But industrial *credit,* in contrast, is not so. The instant one attempts its transfer by force, it evaporates into nothing. Hence Russia's industry is paralyzed and its cities starve while its agriculturist peasants, relatively speaking, thrive.

Because Russia, in spite of its agriculture, is forced to live in a modern world relying upon industry and interchange, its gain due to its nationalization of the land has fallen far short of solving the problem of life for its dwellers in the cities. More time—five years, at least —must elapse before any conclusion may be drawn as to success or failure.

merely the wage-earners. It is to abolish all poverty. To do that one must attack the thing which enforces poverty upon many who are not wage-earners, which is set in motion by many who are not wage-payers, namely, commercial competition.

(5) *Responsibility for the wrong rests upon no one economic class rather than another.* All who spend money have had their part in its development. Those who now profit by it the most are as helpless, as a class, to abolish it as are the wage-earners or the petty bourgeoisie. As private citizen the man of wealth and possible leisure is under heavy responsibility for doing far more toward cogent debate of economic problems, from the standpoint of the Ultimate Consumer, than he now manifests. But as employers each of this class is as helpless as are his employees.

(6) Contrary to the many shades of belief of the whole socialist and trades-union movement, *the capitalist-employer class possesses no economic power whatever to remove the burden from the poor.* The employer is neither a free nor a competent remedial agent, even in behalf of his own employees; for he has no slightest control over the prices which they are forced to pay in the outside world, and this is where their hardship lies.

He can raise wages slightly, if he will, it is true; but *he cannot make them buy more.* Indeed, he cannot help the higher wages buying less. *Whether wages be raised voluntarily, or by force of law, or in surrender to strike or sabotage, the result to the working-classes is inevitably the same*—THEY BUY LESS AS THEY RISE.

(7 and 8) The remedy for economic ills, however it may be accomplished, lies solely in *bringing prices down,* rather than in forcing wages up; for, as prices are forced down by the only means competent to do that job—the abolition of all ownership-in-industry—wages, in spite of the fact that they will fall somewhat, will buy more; whereas when wages are forced up, with no attention paid to prices, they inevitably buy less.

The raising of wages certainly cannot help matters, for wages have been rising recently as never before in the last century; yet the result is that the economic problem has been growing upon us with an acceleration and an intensity never before experienced. *As wages rise the employer-class, far from appearing as the losing source of these greater riches for the* *wage-earners, has gained in wealth as never before.* When will labor learn the lesson standing out from every knob of the economic situation—that *wages are not paid by the employers, but by other wage-earners!*

(10) No conceivable pressure towards the elevation of the wage, whether by strikes or by socialistic legislation, whether apparently successful or not, can ever possibly reduce by one penny the wealth of the employing-class as a whole, through a transfer of their wealth to the working-classes. Neither higher wages, nor higher income-taxes, nor profit-sharing, nor sabotage, nor a general strike, nor any other scheme yet proposed for tapping the dropsical tills of the employers, while omitting to install the sovereignty of the Ultimate Consumer over a unitary factory-system, has ever succeeded in the past, or will ever succeed in the future, in making capitalism poorer and labor richer. Every such effort has always made either the employer richer, or labor poorer, or both.

The policy of attacking entrenched wealth or "vested interests" by direct frontal assault, rather than by besieging its source of supplies at the shop-counter, has always been for the people a game of "heads, I win; tails, you lose." However the stronghold of commercialism may have been penetrated momentarily, the effort to abstract anything has always proved futile. The suction inside is too powerful. At every hole punctured the borer is always sucked into the hole—body, purse, vote and soul together!

Automatic Involuntariness Again.—Whether it be the raising of a factory-wage, prying up prices faster than wages; or a generous tip to a waiter, dropping his time-wages as his average tip increases; or a customer's refusal of change from a sidewalk newswoman, automatically swelling her cost of living as fast as the sellers find that she has more money to spend; or a check mailed to a refuge for wayward girls, removing from the street where she made her living one competitor with the other girls, and thus admitting to profitable employment one more unfortunate, industrially unemployed—whichever of these or many another similar instance matters not. The economic result is the same. *Wherever the human heart, whether driven by generosity or by patriotism, attempts to overrule the stern law of economic equilibrium*—the equilibrium of a rigid system established neither by society's malice nor even by its personal greed, but enforced merely by society's stupid reliance upon the archaic cottage-system of ownership-in-industry where no ownership is needed—*there failure is inevitable.*

When we begin in the right way, by observance of these unyielding laws, our success will be as remarkable as it has been in mechanics, where we are most careful to proceed with all humility before natural law. But by bull strength and stupid disregard of cosmic principles of equilibrium—which apply in sociology just as cogently as they do in mechanics, chemistry or electricity—we shall accomplish nothing.

Under the commercial system wealth grows irresistibly, and poverty likewise. A high tariff has caused the rich to grow rich very rapidly; but a reformed tariff, instead of reversing that process, has only seemed to accelerate it. Consolidations in business have apparently aided the expansion of wealth; but what enforcements of the anti-trust law have yet been accomplished have led only to still greater dividends, after the consolidation had been dissolved. In wartimes the rich make huge fortunes quickly; in peace they make still larger ones almost as quickly. By day and by night, on week-days and on Sunday, in summer and in winter, under Republican, under Democratic and under Socialist administrations, wealth continues to accumulate irresistibly in the hands of the wealthy, or else the poor grow more uncertain of their tenure of life. *The wealthy themselves cannot prevent it!*

In this huge and very human crisis the heart has indeed a most important function to perform; but it is not, like shrewd King Canute commanding the rising tide to stop, to try to overcome the huge and inevitable results of a wrong economic world-system by means of individual, pecuniary generosity. Instead, the duty of the generous nature is at least dual in form.

First, it must face the rising crisis with courage and faith in man and God, rather than with bitter, foreboding indictment of others; for it is a wrong system to be indicted, rather than man himself, and the system is here because of our common stupidity, rather than our malice, greed or other immoral trait. We must preserve patience, faith and love toward those who, born differently, reared differently and situated differently in the economic structure from ourselves, inevitably believe differently and act differently from what we believe to be right.

For we, too, may not be quite so right as we think. *In a situation so intricate that the most intelligent of men cannot agree as to what is the trouble, or what the remedy,* the expression of dogmatic, positive, sweeping statements, particularly when they are condemnatory of millions of men quite unknown to the speaker, is obviously childish, if not worse.

Secondly, we must preserve faith that every storm clears the air and waters the crops, as well as destroys somewhat. In the gathering crisis the gains to us all in sight are greater than those involved in any previous cataclysm of history.

But above all, we must remember that this basic law of present public helplessness over social ills is due merely to the fact that we possess to-day no competent science of sociology. Until we acquire one, our blind and blundering social progress must develop one painful collision after another.

(11, 12 and 13) From all of the above considerations it must have become plain that the whole class-struggle policy, trusting to victory in an endless battle which concerns no vital principle, is a mistake. It accomplishes not even temporary nor local good for the working-classes, but always permanent harm.

Any attack, in order to succeed, must not be made in the name of any one class, whether wage-earner, capitalist, petty bourgeoisie or underpaid intellectual. Only in the name of all economic citizens can success be attained; and the one economic function common to all classes is Ultimate Consumption. Attack must be made in the name of all, by the Ultimate Consumers organized in mass, upon plutocracy's sole base of supplies—*the shop-counter.*

(14) *There is no ground for reliance upon political action to help the economic situation.* While the socialist successes at the polls have been too limited, as yet, for reliable conclusions to be drawn (from the fact that they have availed nothing to remedy the economic situation, nor even to prevent it from getting worse) yet there are broader grounds from which it may be predicted that no conceivable socialist success in the political field can affect even slightly our economic hardships. These grounds lie in the fact that *nowhere in our political government—nor in that of any other country, for that matter—has yet been organized the only power competent to control the forces now creating those hardships*—the power of the

Ultimate Consumer. For this is a very different thing indeed from the power of the Voter.

These oppressive forces, already fully outlined in detail in preceding chapters, consist in, first, the steady drift of population out of productive and into negotiative occupations; and secondly, the steady, but accelerating, accumulation of interest-bearing securities. Neither of these processes can be touched effectively by legislation. The right of the Voter to control either of these has never yet been voiced. Still less is it recognized in our Constitution.

The right of each citizen to choose freely his occupation is one of the most fundamental features of our personal liberties, traditionally prized by all Americans for generations. It will require no small cataclysm before it will be surrendered at all. It will never be surrendered (except temporarily, under duress) to the authority which the socialists wish to enthrone—the producers organized as a class.

The issue of interest-bearing securities is a process presumably far more amenable to legislative control than is the choice of an occupation. Frequently measures have been proposed for accomplishing this control. But none of them have worked, and none of them can work, because of a resistant phenomenon far more powerful even than a racial prejudice. This is the fact that *the negotiative and circulatory valuation of every interest-bearing security is based wholly upon the prospect of continued returns of interest and dividends in the future, in ever-increasing amounts.*

It is the constantly wavering estimate of this probability, or expectation, regarding one issue or another, which requires hourly announcement from the exchanges, through an intricacy of tickers, financial columns, Wall-street editions, etc. That which wavers continually so delicately certainly cannot be relied upon to manifest solid stability under stress. Its complete collapse is one of the most probable of phenomena.

This being so, the conclusion is irresistible that whenever the people shall have made up their minds to use their political power to end our economic hardships, by whatever attack upon profits and dividends may be imagined, their success at the polls, after a preliminary national debate, can have but one effect. *It will precipitate all security-valuations to a small fraction of normal, in a panic such as has never before been known.*

This prediction is no mere estimate or guess. The inexorable law enacted by the commercial world itself—that all valuations depend solely upon prospects as to future profits or dividends—makes it indubitable that, the instant the people have given formal notice of a disposition to attack profits and dividends, that instant all security-valuations must collapse permanently.

To anyone who has digested the chapter upon Unemployment, above, this collapse means the immediate shutting down of factories and railroads in major fashion, the trooping of multi-millions of unemployed into the streets, the cessation of all but insignificant supplies of food and fuel, and hence the inauguration of revolution. Thus, even if we possessed to-day a public opinion requisite for adequate economic reform (which is very far from being the case) it could not now get itself enacted into any law competent to cure, *without thereby exploding the whole inflated and highly inflammable balloon of commercial credit, upon which we rely for our daily life-support!*

It is already too late to avoid revolution. Our heavy responsibility lies in the direction of mitigating, by prevision, its horrors.

This is the one fact of most cogent importance in any estimate of our social future. Yet it is the one fact totally ignored in the teachings of the professional sociologists, and in the philosophies of either the old-party, the progressive or even the socialist programs for reform.

We have already accumulated this vast magazine of explosives, and have reared our entire political and economic structure thereon. As yet we see no way even to check its irresistible and accelerating increase. Its disposal is the one most vital problem of modern sociology. Yet these pages are the only non-socialistic ones giving warning of the danger involved in its existence; and not even the socialists comprehend at all the impossibility of its gradual, peaceful removal.

History's Repetitions.—Is this language to be regarded as unduly pessimistic? Look at past American history. What was it which precipitated secession in 1860, making civil war inevitable? Merely the *election* of Lincoln!

Months before he had entered the White House, to manifest his policy by any administrative act whatever, South Carolina seceded, merely because he had been elected. This positive expression of public opinion was too much for our social instability, already tottering under a burden no heavier than that of a widespread human injustice to an admittedly inferior race. Was the situation so much worse than now, when it is white "intellectuals" who are oppressed?

Yet this occurred without Lincoln's being an abolitionist. He was merely a progressive. In spite of popular superstition to the contrary, it is distinctly true that Lincoln was never an abolitionist. In his campaign-utterances before election and in his official proclamations from the White House after his election, he held himself rigidly to the view that he had no authority to touch slavery in the Southern States. His statements were most specific. His utmost menace against slavery was that he proposed to *restrict its growth into the territories governed by Congress rather than by state-constitutions.*

The parallel with our present crisis is exact. There can be no candidate, however reserved, nor any platform, however gentle, upheld at a national election, which reveals a popular determination *even to restrict the growth* of commercialism, that commercialism does not immediately collapse, leaving us floundering in an anarchy of economic interregnum. This interregnum must continue until public faith shall have been resurrected in an entirely novel system of industrial credit, namely, non-interest-bearing, non-negotiable factory-system requisitions, issued under an authority not now existing anywhere in the world—the organized economic sovereignty of hundreds of millions of Ultimate Consumers.

But that step is as far in advance of anything now embodied in our political organization as a republican form of government was in advance of the monarchies of 1776. Anyone who thinks that such a gigantic stride forward in the evolution of civilization as that, is going to be voted into existence peaceably, overnight, as we acquired our extension of the suffrage to women and prohibited alcoholic drink, is welcome to waste his time in political efforts at economic reform. Such a person has lost all sense of relative magnitudes.

(15) *All direct attack upon the problem of unemployment, whether by means of forced public works, employment-bureaus or what-not, always has failed and always will fail.* This is because no such measure touches even remotely the true cause of unemployment, namely, the current and growing volume of

commercialism, with its resultant deficit in purchasing and hiring power.

(16) The form of society destined to emerge ultimately from all this intricate confusion will certainly be one, whatever may be its features in detail, *based in some way upon the natural sovereignty of the Ultimate Consumer,* and not recognizing the producer in any authoritative capacity. As a Consumer the producer will then enjoy rights, and as a human being he will enjoy comforts, such as now cannot be imagined. But this will be because, in order to wield his natural sovereignty as a Consumer, he has yielded his unnatural sovereignty as a producer.

During the process of attainment of this ultimate society, as in its permanent operation, everyone who appears with a dollar to spend must have just as much to say as to its destination as any other Ultimate Consumer. At the shop-counter of the truly reformed state no questions will be asked (as the socialists would decree) as to whence cometh any dollar, but only whither it goeth. That point once cared for to suit the Consumer, there need be no worry as to any unearned money being brought in for spending. *It will not exist.*

As for the vast fortunes of unearned money already accumulated, there need be no worry, as with the socialists, as to how to transfer it to the proletariat. It will never survive the first effort at its transplanting. The collapse of all commercial securities, rental valuations, etc., with the consequent dissolution of our vast fortunes, *will be the first, not the last, act* of the automatic social convulsion now inevitable.

If history repeats itself, this process will not take long. It will be accomplished to a major amount within the first week or so of collapse. But four or five years may be consumed in the gradual evaporation of the remainder.

If the universities once allow this crisis to come to a head without adequate warning to the people, these fortunes will suddenly be found to possess the same negotiative valuation that the slave-property of 1850 possessed after Fort Sumter had been fired upon, through the slavery-crisis having been neglected until war had become inevitable. Standard Oil stock or U. S. Steel bonds have manifested many fluctuations, up and down, heretofore. There is nothing in the laws of the universe to prevent their becoming on a par with Confederate money to-day—preserved occasionally in show-cases as curiosities having no other valuation.

It was so with the special privileges of the French aristocracy of 1785, which were then enormously valuable as mere incomes. Holding on to these unearned special privileges a little too long, as the slave-owners held a little too long to slavery, brought their valuations suddenly to zero; and, in addition, put most of the owners thereof where they no longer needed consolation for the collapse of their privileges.

It has been the same, during the last decade, with the commercial value of German royal prerogatives, which five years ago were immensely lucrative. This possibility of history's repeating itself is a point which our businessmen quite fail to appreciate.

Nor must the author be so deeply misunderstood as basing any such a prediction as the above upon any policy of deliberate confiscation. He has already stated plainly that he considers any such a policy unwise. More than that, it is quite unnecessary. All that is needed, in order to make inevitable a complete collapse of all negotiative valuations of securities in the near future, is a continuation of the present commercial policy of reckless inflation of prices—a policy which has prevailed now for a quarter of a century and which is still being accelerated, up to the latest advices—a policy just as foolishly blind to the natural limits of a people's endurance as is the continual shortening of the working-day by the labor-organizations. Yet, if this book's analysis be at all sound, this is a policy *not under control even by the commercialists.*

If this last statement be unsound, the commercialists know well what alone will constitute its disproof, in the only manner convincing to the people. I refer to the lowering of all prices, not by some minor fraction, but by the eighty-odd per cent necessary to bring them down to the natural, factory-system level.

(17 and 18). The most important items of *credit* and of *costs of distribution,* which are quite omitted from the socialist program, have already been treated from the standpoint of Consumerism with ample fullness, in other portions of this book.

True Economic Democracy.—For all of these detailed reasons, as well as for the higher, abstract one of purity of economic democracy, it may be laid down as a fundamental principle that, *in the organization of any effective economic reform all economic classes must be recognized, welcomed and included from the start.* Between Ultimate Consumers no distinction can be tolerated. The permanent success of any revolutionary movement will depend basically upon every person's being both invited and forced to come in; and only the authority of *all* can enforce that.

Class-Consciousness.—Every class-movement of past history, whether of an upper class or a lower one, whether in the right or in the wrong, has been a failure, ultimately if not immediately. Nothing nationally constructive can ever come of any class-movement whatever, formed on lines however drawn across the social structure. It can come only through a self-purification of society acting as a unit. This is the lesson which Lincoln had such trouble in teaching the North, as it slowly conquered the South.

Without doubt these tenets of orthodox socialism which have just been condemned, and their advocates, will play a prominent part in the impending crisis; but it will be a purely destructive part. Without doubt its narrow-minded leaders will rise to great and tyrannical, if temporary, power. But their power will be as short-lived and suicidal as that of the Dantons and Robespierres of the French Revolution. They will drag each other down into the mire of error and outrage, forced from each mad act to a still madder one by the falsity of the economic premises from which they started, and by the consequent futility of their measures for reform; until they finally execute each other as the only visible obstacles to a success which had been impossible from the start.

Their final overthrow into oblivion will be by the hands of those whom they gayly hailed as "Comrades!" at the start. It was thus with Camille Desmoulins, for instance, who in 1789 jumped upon a table in the garden of the Tuilleries and originated the green cockade of the Revolution by sticking a sprig of foliage in his hat. For four years later he was dragged to the guillotine by his fellow "citizens," collapsed into a pitiable wreck by his agony of bodily fear.

And yet, at bottom, these leaders of socialistic thought will have been guilty of no more heinous sin—unpardonable in nature's eyes—of making a mistake at the start in their political economy. It may be a "gloomy science," but it pays to study it.

The more intelligent and Americanized among the socialists have already revolted in horror from the political doctrines of orthodox socialism; yet they seem unable to perceive that these broader political errors arise inevitably from a wrong economic doctrine. Soon they must revolt again and again, in even greater horror, as the true sequel to these false premises gradually becomes revealed.

For when once the procession of events shall have torn ruthlessly from the high-wage, pry-it-out-of-the-employer, class-struggle tenets their past disguise amidst the intricacies of peace, or their present submergence beneath the flood of war, they will stand suddenly revealed in a naked truth far more horrible than is now suspected by their advocates—one-half of society tearing at the throats of the other half, with dynamite and arson, machine-gun and mine, pillage, murder and rapine —with Wall street and Fifth avenue in ruins, with factories and country-estates in flames, with railroads wrecked and communication paralyzed, with famine breeding pestilence in a population even worse congested than now, and with the possession of wealth as fatal a crime as was the ownership of a title to nobility in France in 1793![4]

Yet here, as in the French Revolution, each side—or each of the twenty different factions—will then work imbued with the belief that it is standing merely to protect its God-given rights. In revolutions as in wars, there has never been an admittedly deliberate offensive; each act is always undertaken as one of defense. From every salient of the French Revolution—from aristocrats, from the Third Estate, from Girondist "intellectuals" and from many different layers of the people, fighting in rags amidst cold and hunger—radiated an unquestionable light of exalted spiritual devotion to abstract, if mistaken, ideals.

To-day both commercialist and socialist groups have each its sincere standard of ethics, *founded upon what each group believes to be the facts.* Therefore this book has been launched in the hope of arousing interest in a scientific, impartial determination of these facts, to serve as a common ground upon which both contending parties may meet, each to perceive wherein it is right and how far it is wrong. But the first need for this patriotic task is a wider prevalence of *intellectual courage*—the factor which seems at present to have ebbed wholly away into the sands, so far as public discussion of social problems by our official sociologists is concerned.[5]

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[4] The above was written at least a year before the word bolshevism became known in America.

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[5] **Force versus Credit.**—Since the above was written another alleged tenet of the socialist movement has come to the fore. This is the proposed overthrow of the capitalistic system by force, and the transfer of its property bodily to the proletariat. This policy is justified as being warranted by the increasingly obvious impotence of political action to ameliorate the condition of the poor. This impotence this book everywhere urges as a fact, yet without drawing from it the conclusions reached by the socialists.

As to just how far this policy of force may actually be advocated by socialist groups in America, or by which ones, will not be debated here. That question of fact is now being adjudicated by several tribunals. Beyond question, the policy of force is openly avowed by the Russian revolutionary government. Unquestionably that government has put it into practice, especially in relation to the ownership of land. Since that has occurred in Russia America has become a field for similar propaganda, until the zeal for it has been temporarily checked by resistance.

But space will not be wasted here upon these questions of exact degree of fact at the moment, because the writer, if he knows anything about social evolution, knows that, once a party has espoused the erroneous class-distinctive economic philosophy of Marx, it is only a question of time when it will inevitably reach the use of the most unscrupulous violence, in its final desperate, but vain, effort to attain the impossible—namely, the bodily transfer of wealth from the rich to the poor, by direct attack, whether political or martial.

For it is to be emphasized here, as the final fault in the socialist program, that it has always lacked all consideration of the vital need, in any form of economic organization for mutual life-support, for an adequate system of *credit.* It has quite failed to appreciate the delicate, untransplantable nature of that vital economic organ.

It always speaks of the property of the rich as if it were a tangible, transferable thing, which the rich withheld from the poor through force and malice, and which the poor might take, when justified, by force. It utterly fails to realize that the property of the rich does not lie in the vast system of visible *appliances* of industry, but in those delicate *credit-instruments* which alone make possible the productive use of those appliances by society.

It overlooks the fact that the degree of productive usefulness of those appliances depends upon the vigor of the people's credit-system, varying from day to day as credit-securities fluctuate in Wall street, through all the wide range from prosperity to hard times, with its unemployment and bitter hardship on the poor. It completely neglects the fact that any collapse in these securities must immediately paralyze every work-

The Need for Social Faith.—Yet another vital factor—faith on both sides in the sincerity of the other—is also conspicuously

man's effort to use any appliance, thereby doubly impoverishing the poor.

This is not reason for urging the continuance of control by the rich. It *is* reason for facing the fact that *the property of the rich, in industrial America, can never, by any power of the majority, be transferred bodily to the poor,* as the land has been transferred in Russia. For the land stays there, undiminished, while being transferred; but the credit-property of rich America will evaporate into nothingness, before even the threat embodied in the first vote of the majority against it could be recorded by the secretary of state, or the first effective armed troop be mobilized for assaulting the safe-deposit vaults.

Indeed, Russian bolshevism is now learning this bitter lesson through experience. Its attacks by force upon the banks netted it virtually nothing. The bank's books showed deposits amounting to hundreds of millions of rubles. This money was demanded. Yet actually only a few millions of cash were to be found in the vaults. *The rest was all credits; and those credits collapsed into nothingness the instant bolshevism reared its head.*

The division of the land among the peasantry by the bolshevists, a measure which probably embodied some approach to justice, has already resulted, we are told, in the accumulation of immense stores of farm-products in the country-districts. Yet the cities are starving and freezing! There are no railway-facilities; and railways cannot be operated, nor rolling-stock built, it now develops, without an adequate national credit-system.

In this matter of providing a competent system of credit lies the last item of contrast between consumerism and socialism. Socialism, based upon the wage-earning producer as its unit, can never evolve a stable system of credit. Consumerism, based upon the Ultimate Consumer, the spender of money, as its unit, lays its foundation upon what is to-day, always has been and always must be, the sole source of all economic credit—the Ultimate Consumer—who links together manufacture and consumption into the only combination really productive of life-support.

For the one lesson which even the intellectual socialists seem unable to learn is that what they call production—bare manufacture—is not production at all, but a bootless waste of effort, until it has been linked with consumption. For the sole thing wanted by man is not commodities, but *life-support; and commodities do not become life-support until they have reached the Ultimate Consumer.*

It is not a question of transportation. That we include in the term manufacture. It is a question of *identification*—identification of the consumer for the goods, and of the goods for the consumer. This can be accomplished only by the Ultimate Consumer. This even the Ultimate Consumer can accomplish only after he has created, as the all-essential economic catalytic, an adequate system of credit, organized over a territory knowing neither sea nor mountain nor map as a divider of lacking. For on each of the many-sided quarrels the supposed facts are largely mistaken. Each side sees in the other's sincere faith only malice, greed, laziness or dishonesty, instead of natural error. Therefore in each case both the philosophies and the acts resultant from these errors become grotesque, inconsistent and cruel. Yet in each case they are indubitably patriotic in intent.

In the name of humanity, what a pity that these leaders among the radicals cannot revolt completely from the error of the high-wage philosophy now, while there is yet time, and that the prominent, liberal commercialists cannot meet them halfway on the road to common sense, by a rational revolt against the cruelties of high prices, and the hypocrisies of advertising, and the sneaking selfishness of interest-drawing, of commercialism!

Growing Dogmatism.—But there seems to be no hope. Of the unyielding attitude of the commercialists naught need be said. Yet the socialists are just as unreasoning. Thus the program of the Intercollegiate intellectuals for the winter-season of 1917-18 publishes the tentative suggestion that this year, in addition to the regular meetings, there should be organized

> "elementary and advanced classes for the study of socialism. It was hoped that the group attending the advanced course might carefully and critically analyze, throughout the year, the economic theories of socialism, with a view to seeing what, *if any respects,* these theories should be revised in the light of modern developments." (Italics mine.)

This, then, is the sole response (and even this was never followed out) of the brains of the socialist movement to the cogent events of the war—the collapse of the whole international socialist organization and policy, with the gravitation of

that economic system which has already been welded into a *de facto* unity by the railroad, the steamship, the cable and the wireless.

Yet let not the reader gloat too hastily over this indictment of socialism for its lack of a credit-system. The one greater error than to believe in socialism is to believe that the commercial credit-system can endure more than a few short years more. The first act of the revolution, if it is to come, will be staged upon the collapse of the world-system of commercial credit. The last act will ring down the curtain forever upon credit in the socialistic scheme, based upon the sovereignty of the wage-earning producers. (February, 1920.)

each group into its political and loyal, rather than its economic and humanitarian, affiliations; the split of the movement in America into two, with the half which has proven disloyal to every American political tradition doing nothing worse than standing loyal to *economic ideas which have not yet been denounced by the departing half;* the later triumph of the orthodox and unpatriotic half, led by Hillquit on a platform of open opposition to the war, in the most successful Socialist mayoralty campaign ever waged in New York; and the denunciation of each half by the other as disloyal and treasonable! Shades of the Girondins! Was there ever a finer reflection of the ethics, and a foreshadowing of the cruelties, of the French Revolution!

Every one of these schisms was indicated, long before the war began, by the inconsistency of the class-struggle doctrine with all the events of past history, just as much as with current events. Every one of these defaults and splits is inevitable so long as the movement as a whole clings to the fundamental economic error of the wage-philosophy. *But this is the one common platform upon which these warring factions still remain united.*

But why, oh Intellectuals, do you await this late date before fully and frankly correcting the error in your philosophies? Why, oh Commercialists, are your nostrils plugged to the scent of volcanic sulphur? Or why do you still believe, after mankind's history, from Cæsar to Kaiser, that social volcanoes can be plugged by force—by imprisonments, deportations and the similar devices of the superficial, the panic-stricken and the stupid?

Consumeration.—The policy of having the Ultimate Consumers, when organized in aggregate, follow this doctrine of Consumerism into action—of acquiring complete control of all industrial, commercial and financial plant and stock, *not through the political government, but by exercise of economic sovereignty; not for the purpose of making money out of them, but solely in order to provide the community with life-support*—will be called *Consumeration.* However the transfer from the present system may be brought about (which is itself a huge problem) Consumerism and Consumeration must be based upon these following items of principle or policy, namely:

(1) *The Ultimate Consumers, suitably aggregated and simply*

organized, are to own all plant and stock involved in supplying themselves with what they wish, from the time the latter leaves the hands of its original producer until it reaches the premises of its Ultimate Consumer. In other words, there are to be in the entire industro-commercial system *only two transfers of ownership for each article, namely:*

(A) *From the producer to the Consumers-in-Aggregate, at the point of original productive effort.* In the majority of cases this will mean merely the payment of wages for labor, as now, which labor operates upon raw material, or partly finished goods, which never cease to be the property of the Consumers-in-Aggregate. In a minority of cases, as with the smaller farmers or poultry-raisers, for instance, the produce itself may remain the property of the producer until it leaves his premises.

(B) *From the Consumers-in-Aggregate to the individual Ultimate Consumer,* when the finished and delivered retail commodity is passed across the shop-counter to him, or is left by wagon at his kitchen-door.

In neither of these transfers of title can anything akin to bargaining occur, because in each case the party stating the price (the agent of the Consumers-in-Aggregate) *is totally disinterested, and is the only person with whom to negotiate.* He is stating, and every person understands that he is stating, merely the result of statistical compilations of costs, supplies and demands, made by equally disinterested salaried clerks, with no profits made anywhere. He has no motive for doing otherwise.

Travel to any other locality would merely bring one face to face with some other salaried agent *backed by these same statistical data and offering exactly the same price.* Not a penny is to be gained by contentiousness. There can be no haggling, that curse of modern life. Every transfer of title will be a take-it-or-leave-it proposition, like the present purchase of postage-stamps. Our whole present furor of negotiation at every turn of life will drop out of sight forever.

The workman, of course, may select his work. He may, and usually will, make his selection with an eye to the price paid for the several sorts. But he will never dream of trying, while his choice of job remains fixed, to alter the pay therefor favorably to himself.

It is not merely that he will be up against a resistance which it would be folly to encounter. It is that *all people will then be fully cognizant of the fact that one can lose as much, or more, on the buying end of life as can be gained on the earning end; and that raising wages raises prices.*

For any one man, under these conditions, to start the precedent of trying to elevate his income otherwise than by producing more for the community, inciting and warranting every other person to start the same campaign of price-raising against *him*, would be suicidal. Only a few fools would attempt it, and they would fail.

All persons active in industry or trade are to work for a publicly known wage or salary. Every activity having anything to do with the supply of any commodity or service sold in the open market is to be recognized, in public opinion and the law, *as a public service and a public trust.*

Then the man who would use his industrial position, whether as a ward-grocer or as a railway-director, for private and hidden profit (as a thing contrasted with his earning as large a public salary as he can secure by giving good service) will have to search long and industriously before finding an opportunity. He will have to seek even further before finding a motive.

Should he be crazy enough to do such a thing he will be ostracized and jailed as severely as would now be a judge upon the bench, a trustee of a university, or a legislator, if guilty of the same act. The purely arbitrary and meaningless line which we now draw between one occupation and another, as to license in this matter of making secret profits without equivalent service to the Ultimate Consumer, is as absurd as any of the crudities in administration which prevailed in medieval times.

(2) *Purchasers will then never be solicited.* Goods are to be made as attractive as possible, by their display in a single, non-competitive bazaar or market, located at a convenient center in each ward or district; but there will be no advertising, no hawking, no peddling, no soliciting. Drumming will then be recognized in law as it is now partially in fact, as an insult to and an imposition on everyone suffering from this uninvited annoyance.

Although every person will then be subject to an emulation in the proficiency of performance of personal duty which is far more intense, because more free, than now, yet there will be no commercial competition between separately owned enterprises, seeking sales and profits nominally at each other's expense, but always at the expense of the Consumer. Every factory teaches that *monopoly is the secret of efficiency.*

The Ward 1 Bazaar, for instance, will naturally be in rivalry with the Ward 2 Bazaar, and each will take pride in making the best financial showing to the City Auditor, who will publish the records of all wards. These bazaars will naturally compete as high-schools do now. But the Ward 1 Bazaar can sell only in Ward 1, and the Ward 2 Bazaar only in Ward 2.

This is wholly to the good of the Consumer, for it eliminates all cross-shipments and duplications of bazaars; while, if the superintendence of the Ward 2 Bazaar be so good that Ward 1 Consumers prefer to trade there, there will be many ways in which this fact can be given effective publicity. *Reputations may be transported across boundaries without cost to the Consumer, but not commodities.*

There need be no worry as to graft, in this future society. Graft is as purely a feature of the commercial system as are street-signs or newspapers mostly advertising. Graft is merely the inevitable injection into politics of the principle now underlying all other lines of public service, namely, *it must pay handsomely or it must cease.*[6]

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[6] One of the surest proofs of this is the fact that *the corrupt political machines have always stood in opposition to public ownership.* For under public ownership, with no profits made, there are no spoils to be divided.

One of the dramatic incidents of the preliminary history of economic reform is that of the Philadelphia gas-works, which happened by chance to be one of the few instances of public ownership of a revenue-earning service in a large, politically bossed city. For years Philadelphia's political machine operated the city's gas-works in such a manner as to discredit public ownership. The annual reports of the superintendent, begging for extensions and improvements, urgently needed in view of the growing population served, were repeatedly denied. Money properly belonging to the gas-works was diverted into other municipal departments, for the obvious purpose of crippling the gas-works. This policy was carried to the point, in at least one remarkable instance, where the department receiving the undeserved funds actually protested against having any more money thrust upon it, because it had wasted all it dared!

When finally the machine succeeded in accomplishing the passage of a bill leasing the gas-works to the United Gas Improvement Company, in 1903, it was against an opposition of all the better elements in Philadelphia politics. The local paper describes the popular indignation

Personally, grafters are as purely the fruits of commercialism as are sandwich-men or ticket-choppers—results of the deficit in employment created by the presence of commercialism, on the one hand, and of commercial standards of profiteering upon the other. Once abolish commercialism and there will be unlimited demand for effort in honest lines, and no pay at all for grafters.

(3) No interest, dividends, rent, etc., will be paid to anyone for the private ownership of anything. Indeed, *no one will be allowed to own anything, except those things which he takes home and never brings back.* One may buy anything in the land, but he may not sell it again. A man may buy a street-car, if he wishes; but the only thing he will be permitted to do with it will be to place it in his backyard, as a playhouse for his children—or possibly for himself to recline within, dreaming of the golden days when men were permitted to own whole roads, upon which the millions must ride and pay tribute, or else starve.

(4) Profits, in the sense of a margin over all costs, are always to be made, by every enterprise or department. This is for covering variations in market or supply, for the expansion of facilities, or for the accumulation of stock as a credit saleable to other departments. *But these profits are never to be divided amongst the people, nor abstracted from the department where made*—except in the form of a small tax to support the insane and other helpless persons. Either in the form of com-

over the act as being ''almost a riot.'' The police were required to clear the galleries after the demonstration of protest. ''From all over the gallery came hisses and cries of 'thieves'.''

As the lease was passed after, and in spite of, an offer from one of the city's most prominent and commercially successful citizens to take and operate the works for the public good upon terms far better for the city than those incorporated in the lease, and since the record of public ownership had been uniformly successful, this indigation is not hard to understand.

This book has no space to spare for an entrance upon the pros and cons of public ownership, as demonstrated in past experience. This one instance is cited, not to prove that public ownership is good, but to reveal clearly just where and what are the forces which are urging us toward private commercialism, and which are discrediting the record of what economic reform we happen to enjoy already. It is well that the people have now had a little education, by experience, with German propaganda.

modities, or as surplus money or credit, they are to remain always undivided, the property of the Consumers-in-Aggregate, to the equal enrichment of every adult citizen, each newborn babe and each enterprising immigrant.

If it be recalled that, under Consumerism, no person may enjoy any purchasing-power in any other form than as a credit upon the books of the Community-bank—which books, so far as income is concerned, are open to the public—it will be obvious how difficult and pointless would be any attempt at private profits, graft or the like, under that system. The whole background for the present belief in graft as a human tendency would be gone. The only possibility in the way of peculation will be the petty larceny of actual cash or commodities; and the inducement to that will have become all but zero by the elimination of all deficit in employment, and of all deficit in the purchasing-power of the dollar.

The political corruption of to-day is merely one department of commercialism. The professional politician must secure assurance to office by the maintenance of a political machine, with its power among the voters assured by distributing jobs to them, exactly as the businessman must maintain his position in the business-world by the constant cultivation of an organization of stock-holders, directors, aides and connections, and of fame and favor amongst the consuming public. The mailing-list and clientele of customers which is the foundation of every successful business is not merely the parallel*, but the progenitor,* of the political machine of the ward-boss.

Indeed, between these two methods of servile fawning for favor, the political and commercial respectively, the author can find little choice. Under commercialism, one is as inevitable as the other.

In the field of politics it is the success of a man in getting into office, and not his efficiency after getting there, which marks him as valuable. In commercialism it is *the ability to secure the business,* and not efficiency in its performance afterwards, which earns the big money.

It is one of the many silent credits to be filed in favor of the statistical argument made earlier in this book that no attempt was made there to include in it the data as to the huge profession of politics, as an obvious department of commercialism—as inevitably politics must be, until commercialism has ceased to exist.

The trouble with this country is not, as is so often said, that we have not enough of business in politics. The trouble is the reverse of this. We now have too much business in politics. *Any at all is too much.* For business aside from politics, business in politics, and politics as a business, are all equally against the interests of the people.

(5) General government, involving only questions of general policy in economic and industrial administration, will then be handled as now, in public meeting, by voting upon the principle of a vote to a person. But this applies solely to intangible affairs. In the industrial system the prime control will be effected automatically by the Ultimate Consumer, when he makes his purchases across the shop-counter.

Confiscation.—It is an axiom among men that possession of a natural right does not always justify its enforcement by violence. The sweeping statements which appear above, to the effect that the Consumer does now already actually own, in equity, *by right of past payment for it in cash,* all commercial and industrial property, do not necessarily imply that he is to seize such property by drastic confiscation. They do mean, however, two important things.

First, *there can be properly no discussion of equities,* in any question as to the transfer of industrial property from private to public ownership. The equities are all on one side.

Secondly, the wiser commercialists, who debate these matters in their larger aspect, must have a careful eye to the future. The evolution of historical events has a horrible way of uncovering concealed murder, so that even he who buys may read. Particularly when world-events begin to crash, in some great crisis, do facts come to the surface and coerce public opinion into acrobatic somersaults such as could never be imagined during the period of quiet preparation.

So every commercialist should take careful heed as to what may be the inevitable sudden overturn of public opinion, as to recompense for his property, when once it has been borne in upon public consciousness, as suddenly and thoroughly as the firing upon Fort Sumter revealed to the people the true nature of slavery, that *all those facilities have already been paid for,* *in cash, by the Ultimate Consumer*—perhaps several times over —and that *commercialism is inherently opposed to democracy.* He should make careful calculation of his chances for receiving then any compensation whatever.

Incomes under Consumerism.—Then as to incomes, after commercialism shall have been abolished. Under a national factory-system each citizen will be paid what the Consumer thinks he is worth, as his efforts are appraised automatically by the Consumer's selections at the shop-counter. The great majority will then earn far more than now, in purchasing-power, because they produce what the people really want.

But, on the other hand, those who can do nothing well but bargaining—whether upon the scale of the petty salesman, drummer or pedlar, that of the professional advertiser, or that of the financial or industrial magnate—will then be reduced to contentment with what he can actually *produce.* In some cases this will still be far above the average craftsman's wage, for superintendence will always be needed, and concealed within the now wasteful activities of many big businessmen lies potential a great power for good for the people. But of this no one can then complain, because each will then receive only in equivalence to what he gives society.

Jewishness.—Usually, however, the commercialist will be dropped many pegs down the scale of social importance, as measured by income. Chief among the illustrations of this hurling of the mighty from their usurped thrones will be that race which has always received in all lands—however wrongly —widespread contempt for its assiduity in bargaining, its cheap display, its persistent intrusiveness and its alleged lack of civic pride—the Jew.

These traits, the weaker characteristics of a race of ancient traditions of greatness, of marked spirituality in some lines, of deep domestic devotion, of greater temperance in drink than any gentile race, and of unquestionable possibilities for great good, have been fostered into over-prominence by the defective philosophy of the commercial system. This is because commercialism wrongly relies upon cupidity, intrusiveness and cheap display as the most effective motive forces within mankind.

Therefore let no person who has ever been guilty of saying that selfishness is the only human trait upon which to rely, ever complain of the intrusive ubiquity of the Jew. For it is this faith within the gentile, upholding the commercial system, which is to-day forcing the Jew, and jewishness in its worst sense, into prominence and power. Such a system as that *invites every bit of jewishness latent within either Jew or gentile to come into the open, and gives it power to inflict itself upon humanity.*[7]

Natural Economics and Ethics.—So, with all incomes equated with natural ability to serve, under the coming national factory-system—with forced unemployment gone, and with all opportunity for making money by display abolished—the modesty and good taste of the artist will be revealed in many a heart never suspected now of sheltering those traits. No one will then wish for more wealth than his family can actually enjoy in quiet tastefulness. *Those lacking taste will also lack opportunity to display that fact.*

Even cities, in their present sense, will then no longer exist. For all such things as grand opera, for instance, will no longer be an excuse for crowding people into a few large centers each winter; for grand opera will then be performed in a hundred places to its present one, and at prices which all can afford. As for the present dazzling combination of hotels, clubs and tawdry theaters, as a rendezvous for fashion supported by dividends, that will be revolting to the non-commercial society, as inexpressibly ostentatious and vulgar.

In every aspect of life the present temptation to display and excess will have fallen away. Life will everywhere assume more the aspect of the old-fashioned college-town—not the modern one, drunken with this same poison of young men with swollen, unearned incomes—but the older classic shades, now soon to be glorified anew by their ability, and their renewed freedom, to give the devotees of wisdom and art the best the world has to offer.

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[7] The author is quite free from any prejudice against the Jewish race. He wishes merely to turn to good account, in the interest of the many wage-earning Jews, what prejudice may exist anywhere against the profit-seeking Jews. As a matter of fact, in the last instance of contrast between Jew and gentile which happened to enter his experience—occurring in a firm composed of two American-born gentiles and one Jew—it was the Jew who proved himself both gentleman and patriot, while the two gentiles proved themselves both snobs and traitors, selling out their partner and their souls for a sum quite too large for such microscopic articles as the latter.

The Program of Economic Reform.—The question as to how to reach the natural goal of our social economic evolution, as intimated above, is a far more difficult one than its mere definition—although even as to this latter, our present public opinion is in a quite chaotic state of disagreement. In this book we have been led pretty directly, by our analysis of facts, into conclusion as to the general form of economic society which eventually must survive; but as to the means for arriving at that destination *every indication has been negative.*

The most important fruit of our work, indeed, has been our proof of the most important fact of all current history, namely, that *no remedy yet practiced, nor even suggested, has shown any sign of accomplishing, nor of being able to accomplish in the future, any gradual, comfortable reversal of our present uncontrollable tendency to expand our commercialism.*

This sweeping statement applies directly to the plan, so popular with the better poised radicals, for acquiring public utilities by purchase. The plan sounds simple, easy and efficacious. As a matter of fact, it is none of these.

There is no person worse deceived than he who says: "Oh, yes. Commercialism is bad, but the remedy is obvious. Let the cities buy the street-car systems and the government the railroads, then the coal-mines, then the oil-wells, etc., and soon everything will be right."

The author, starting in 1889 with a recognition of the evil of commercialism, himself believed just that for twelve or fifteen years. But the continued study of social problems forced him to see the impracticability of any such a comfortable plan as that. The trouble lies in the perversity with which every purchase of a utility by the public—as well as every lost day of time in which we do nothing—*only increases the volume of commercialism.*

So there are only two practicable positions for the man-in-the-street to take. One is to be an out-and-out commercialist, defending every feature of the present system. The other is the far more uncomfortable one, demanding great mental courage, of regarding commercialism as basically wrong and as certain soon to fall, and yet holding that *no known weapon of attack, including public ownership, is competent to check its growth and reverse it into a gradual abolition.*

This is not because public ownership, when unburdened with interest-charges, or when complete as a national policy, is not desirable. It is because fractional purchase at this time would increase, rather than lessen, these burdens. It would be a step away from, rather than toward, the true goal.

For any such a purchase, at any valuation approaching current commercial appraisals, and paid for in interest-bearing bonds, is a swindle to the people. The swindle lies not merely in the price to be paid, for that would be negligible *if it only bought us economic liberty.* But it does not. Under present conditions it would buy us only a further weighting of our yoke, while losing us invaluable time. Incidentally, it would add to the accumulation of supposed evidence against public ownership, in its failure to cure instantly our visible economic ills.

The Fluidity of Economic Causes and Effects.—For the prime fact to be remembered by both sides of the public-ownership debate is that *the public owenrship of any given service—urban transit, for instance—is not to be expected, even in theory, to improve that service appreciably.* It may reduce fares slightly; but it can do even this only momentarily, because commercialism rampant everywhere else is raising the prices of all materials, and hence also wages, so rapidly. It may reduce somewhat the crowding in non-rush hours, but it cannot possibly reduce the congestion in rush-hours. It cannot reduce even the price by any proportion approaching what the statistics displayed in this book might lead one to expect.

The reason for all this is that the evils which are obvious in our transit-problem to-day *are not due to the commercialism active within the transit-system, but to that vastly larger volume of commercialism prevalent everywhere outside.* The trouble with our railroads, whether urban or interurban, is chiefly high wages and prices for supplies. The commercialism within its own confines is but a minor feature, compared with that outside, because its own field is relatively a monopoly, whereas the external field of wages and prices is one of unlimited costs of universal competition. This external difficulty the public ownership of the transit-systems, even if it could be carried out by means of non-interest-bearing bonds, bought with money which was not allowed to re-invest itself in commercialism, cannot hope to touch.

In a previous chapter it was shown that congestion in cities is not the result of the paucity of transit-facilities, but is a tendency enforced by commercial forces at work everywhere, *which tendency proceeds always as far as the transit-facilities will permit.* Hence more transit-facilities permit more congestion. Our modern congestion in cities exists, among other reasons, because of our wonderful development of transit-facilities.

Therefore, any improvement in our transit-facilities, *whether in their physical form or in price,* through public ownership, can only increase, rather than decrease, congestion, discomfort and discontent!

But this fact that any isolated bit of public ownership cannot improve its own field of action more than slightly—or perhaps visibly not at all—striking as it may seem, is nevertheless irrelevant to the problem of economic reform, except in the connection given here. For it proves, not that public ownership must always be futile, when adopted as an exclusive national policy, but that its good fruits—like all economic effects, whether good or bad—are *fluid.* They soak away from their source into other economic fields, and reach the Ultimate Consumer only after infinite intermixture with other economic factors.

The Post-Office.—Take for example the post-office, which has been publicly owned for over a century. It has always been of great value to the people to have it publicly owned. However commercialists may sneer at its obvious faults, no one dares to suggest its commercial incorporation.

Yet the employees of the post-office are not appreciably better off than those of private concerns. The conclusion from this is not that public ownership is unprofitable, but that it is *incomplete.* For the good evolved by the post-office goes not to its employees, but, like the good or bad evolved in every other economic activity, *to the tens of millions of Ultimate Consumers.*

For—it cannot be repeated nor emphasized too often—*it is not whence a man draws his pay which measures his welfare, but where he spends his money;* and the employees of both postal and private industries buy in the same shops.

In general, the percentage of improvement in the welfare of the people naturally to be expected from any given bit of public ownership *is merely that which the reduction in volume* *of commercialism due to this isolated bit bears to the aggregate volume of commercialism in the entire country.* But this, as we have seen, is a percentage always very small, and one which is, as apt as not, to be made zero or negative by attempts at public purchase.

The Parcel-Post.—Finally, consider the effect upon the nation's total volume of commercialism of any such an extension of public ownership as the inauguration of the parcel-post, as a means for the much hoped for gradual abolition of commercialism. This recent step in advance, it must be remembered, was not saddled with a dollar of expense for buying out the existing private express-companies, as is usually the case with projects for public ownership. Its inauguration, so far as these were concerned, amounted to sheer confiscation. Yet, even under these favorable conditions of installation, *this drastic move succeeded in canceling only such an amount of total commercialism as the normal expansion of the latter makes good about every ten days!*

In the ordinary course of events we can hope to get such a step as the parcel-post taken only about once every ten years, if that often. Yet there are still educated people who point to the parcel-post and similar governmental measures, and seriously argue: "Are we not plainly making gradual progress in the abolition of commercialism?"

Competition and Confiscation.—It should be noted that the government's inauguration of the parcel-post amounted, in effect, when viewed from the position of the owners of the express-companies, to a confiscatory policy more drastic than any urged in these radical pages. It was more drastic than any advocated by any radical platform known to the author, except those advising open loot or sabotage by violence.

To advocate any such a policy generally, openly calling it confiscation, would be to invite an avalanche of denunciation from the entire orthodox press. Yet, just because the parcel-post enterprise was called "competition," it went through without more than a ripple of protest—with approval by the majority, indeed.

Yet the fact is that commercial competition and confiscation are, in effect, one and the same thing. When the businessmen once comprehend this identity, they and the radicals will be in far less danger of dropping the national basket of eggs between them.

Therefore this book does not counsel any drastic confiscation of these properties, so sorely needed and already paid for, by the public. It is not merely that those whose acts have brought upon us our present situation have acted, usually, in personal innocence, guided by maxims which are all but universally accepted by the people as "good business," and which are practiced by every petty tradesman. It is merely that, beyond all questions of equity, and *in spite of the fact that for many years the commercialists have been actively confiscating the property of the Consumer,* confiscations of commercial property by the people, in return, would be a most mistaken policy—a boomerang sure to react soon in a greater virulence of commercialism, posing then as a martyr triumphant over persecution.

So, even to those who are impatient to have the state purchase these properties, our advice is—wait! The bargain will improve with time. The day is soon coming, forced upon us by the commercialists themselves, *when these properties can be had without either purchase or confiscation.* For they will then be worth just what negro-slaves and confederate money are worth to-day. And the present value of these latter properties, it must not be forgotten, are the result, not of any deliberate confiscation, but of a policy which the Southern slave-owners themselves enforced upon a reluctant North.[8]

Consistency.—Should these conclusions as to the inevitable eradication of all commercialism, even under a non-confiscatory policy, appear to any reader as too drastic for acceptance, the author's sole warrant for his position is to refer back to page 144. There he challenged any commercialist, or any body of commercialists, after taking due thought, to disagree with the author as to the promptness, thoroughness and rigor with which any capitalist-employer in the land would eject summarily from his factory-premises every vestige of ownership-in-industry, if he should some day find it lodged there, enforcing an immediate and complete return to the pure non-owning factory-system.

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[8] The possible purchase of public-service properties by the people, at commercial valuations, is beginning to loom large before the business-world as a new channel for the unloading upon the Consumers of a vast new flood of interest-bearing securities. The following is quoted, as a most significant sign of the times, from the New York *Times* for Nov. 2, 1918:

> "At the conference of the American Electric Railway Association in the Engineering Societies Building yesterday a resolution was introduced recommending that the member companies facilitate the municipal ownership of the electric railway-systems. There were present representatives of about 85 per cent of the electric railway properties of the United States, of the value of about $6,000,000,000. The resolution was the first concrete movement for the transfer of this vast amount of property to public control."

Yet the horror and indignation with which this supposititious employer would view his cherished factory (whose efficiency is the pride of his life) when thus poisoned, stunted and deformed by this economic parasite, as a leper by his germs, would be slight when compared with the Ultimate Consumers' present view of the industrial system as a whole, which he alone supports. For he would see in it its current condition of growing, malignant, commercial leprosy—leaving in action but maimed fragments of our normal, potential productivity—not only paralyzed in usefulness, but covered with hideous sores of discontent at that.

The sole possible point of difference between author and reader must be as to premises, not as to conclusions. If the Ultimate Consumer does support the entire industro-commercial system, as the author contends, then these drastic conclusions stated above are inevitable. If not so, then the author's entire philosophy falls to the ground, as a delusion as powerless to spread as the dream of a lunatic—and is not worthy of refutation.

CHAPTER XXV

THE PATH BEFORE US

WHAT has preceded herein has been, as nearly as the author could make it, impersonal and scientific, beyond debate. It is difficult to see how anyone who accepts the factory-system can dodge its conclusions, except by impeaching our best accredited sources of national statistics.

But at this point the author's proper function, which is that of a student of facts, and not at all that of the statesman or man of affairs, approaches its end. Yet it may not be amiss to add some conclusions as to the path before us—conclusions for which he is responsible in a less scientific degree—conclusions bearing rather the nature of personal opinions, formed during the years of work and debate incidental to the preparation of the more rigid statements made above. Therefore the following suggestions are offered, by the student to the man of affairs, as tentative only.

That the situation makes urgent demand for immediate action has been the repeated message of this entire book. Obviously, to all peoples, but particularly to liberty-loving Americans, an immediate alarm and summons should go forth in clarion tones:

"Organize as Ultimate Consumers."

Into this organization draw every adult person, without regard to sex, race, occupation or income! *The sole criterion is whether one spends money or not.*

Organize, as only the Ultimate Consumers can do, to make your nineteen-cent dollar a hundred-cent dollar as you spend it. Organize to make employment continuous and certain, always exceeding the people's natural productivity. Organize to bring production into vogue again—not by relying upon exhortation, but by so directing your united disbursements that only producers receive anything. Organize to disperse automatically our congested cities, and to populate the waste-districts of the country with homes, farms and gardens. Organize to assert the real taste of the people for the beautiful, so that the ugly, degenerate things, born of competive haste and congestion, shall melt away into the splendor of natural life. Organize to overthrow the yoke of the dollar, and to enthrone the worth of humanity!

Yet, when once this organization has been effected, its policy should be confined to activity in education. *Education as to true radicalism* should be pushed with all the haste and energy of a military campaign in the face of an advancing enemy. For time is of inexpressible value.

But naught else should be attempted now. The reason for this is that your aim is not to attack commercialism itself, for that cannot be touched by any known weapon, short of a concerted move of all Consumers to abolish it—an act which can only precipitate complete commercial collapse and inaugurate revolution. Your inevitable failure, if you stop short of this, will bring you only ridicule. Your very heavy responsibility, if you deliberately start to do this, will be such that few careful people will care to join you.

Moreover, any premature precipitation of the collapse of commercialism, by attack from without, is apt to be followed by a temporary recovery from within, prolonging present evils, and delaying and exaggerating the final crash. This is the last thing desired. *Commercialism should be left alone until it commits suicide,* as negro-slavery did—as every wrong institution has done—in so thorough a way that later revival is beyond debate.

The Pivotal Fact of the Immediate Future.—Any plan for the gradual amelioration or cure of the present economic situation overlooks the basic fact of the very nature of capitalism, namely, that *it lives solely upon the expectation of continually increasing its profits. It is the prospect of future income which alone determines the valuation, the fluidity and the social usefulness of its vast principal.*

Capitalism, therefore, can no more stop increasing those profits without wholesale collapse than a bicycle-rider can stop without tipping over. It cannot even face an expectancy of having to cease its accumulation of reinvested profits, dividends and surplus, and avoid collapse. And when capitalism collapses the next time, every class must suffer hideously from enforced idleness, famine, anarchy and pestilence.

For when capitalism collapses it can do so only as a ruptured balloon collapses—all at once. Within a week most of our factories and railroads will be idle, farm-produce denied access to market, congested cities starving, and labor everywhere unemployed—all without the slightest will-power in any branch of society to cure this paralytic collapse.

The Detonator and the High Explosive.—The problem of the immediate future pivots centrally upon this prime fact, namely, that *the instant that capitalism is given to understand, by an expression of public opinion in favor of any reform whatsoever which indicates plainly the people's intent to remedy the wrongs of commercialism, or to arrest its further accumulation of profits—that instant it collapses.* And from this next collapse of valuations there can be no recovery. Whenever it may come it sounds the knell of commercialism.

For our whole existing fabric of industry is built upon the confidence of the commercial world in endlessly accumulating profits and dividends. The instant when that confidence is undermined by any united expression whatever of the will of the people to arrest that process, this whole fabric must collapse as a unit.

Such an event would be merely an exact parallel with the outburst of the French Revolution, or of our own Civil War. The former was precipitated by nothing more radical than a defiance of the king's authority by the most conservative of France's property-owners; but the aristocrats had taken care to pile up, first, a magazine of high explosive in the form of concealed national bankruptcy—exactly what the commercialists are doing here to-day. Hence, *and for this reason only,* what ensued was not the usual incarceration in the Bastille, but revolution.

As to the Civil War, that was *not* precipitated by the abolitionists—as must have been the case if the believers in the psychological control of history by will-power be right. Nor did it come to pass through any revolt of the oppressed from below, as must have been the case if the socialists' faith in a revolution by "general strike" had any foundation in human experience. The fizzle of the revolution of 1848 in Europe, and that of John Brown's raid here in America, in 1859, prove that.

No, the Civil War was precipitated by the mere *election* of Lincoln, on a platform sworn to leave slavery untouched where it was established—merely to prevent its territorial expansion. Yet within a month from that election South Carolina, without waiting to ascertain what would be Mr. Lincoln's policy when in the White House, *seceded.* The fat was then in the fire, and civil war inevitable.

During the winter the rest of the Southern States followed South Carolina. In April Fort Sumter was fired upon. In every act of aggression which made war inevitable *the slave-owners were the initiators.* And as soon as Sumter had fallen the true nature of slavery fell disclosed, and the northerners who, five years before, had mobbed the abolitionists and elected Buchanan, marched south and gave up their lives to abolish slavery.

History does repeat itself. It is those who to-day are mobbing the radicals—agitators not one whit more narrow-minded, wrong or irritating to the placid than were the abolitionists of 1856—who, five years hence, will follow the example set them by the electors of Buchanan. They will give up their lives in abolishing forever that commercial system the inequities of which are the source of all radicalism.

Education the Vital Necessity.—For all these reasons educational effort is your only outlet—and it is the most important one. *For the greatest misery attendant upon revolutions comes not from the loss of the autocracy, the collapse of which brought it on, but from the anarchy following as a sequel thereto, because of a public opinion entirely unprepared for it,* in the sense of knowing the higher good toward which destiny was thereby forcing civilization forward. Your aim should be to work, night and day, to prepare, against the crash, a foundation of wholesome, responsible, well informed, and therefore confident, public opinion—to replace that blind and chaotic, and therefore panicky and turbulent, lack of any coherent sentiment regarding social evolution which our universities are now working so diligently to bequeath to us.

A panic-stricken person, we know, is irresponsible for his acts; but a panic-stricken people is far worse. It becomes demoniac in its blunderingly cruel efforts at self-preservation. The worst excesses of the French Revolution, upon examination, become plainly due not to malice, but to *fear.* Our own most shameful periods of American history—the mobbing of the abolitionists before the war, and the "reconstruction" of the South afterwards—were both due merely to uninformed, unreasoning social fear.

All Minor Reforms Futile.—Immediate economic relief is impossible. Civilization now stands entangled in an economic quicksand. Whatever move it may make involves it only more deeply in a threatened suffocation by commercialism—or if not that, then in revolution forced upon us by its collapse.

Only attitudes of mind can be altered without harm. Nothing can be done except to let commercialism expand as peaceably as it will, until it shall have exploded beneath its own feet the magazine of inflated credits and valuations which its own fatuous efforts have accumulated.

For its own "initiative," so highly prized, has arranged both detonator and fuse. The trigger is slowly, but surely, being cocked by the unrestrained, uncontrollable elevation of prices —a policy which the businessman seems to dream, with a naïveté beyond comprehension, can be continued without penalty.

Therefore upon all classes is urged quiescence and study, but most of all—*combination as Ultimate Consumers.* Upon this ground all classes can meet without jealousy, friction or fear.

To the working-classes non-resistance by strike is seriously advised—not because you do not deserve more life-support, but *because you cannot get it that way.* There is no possibility that this advice will be heeded by labor-organizations; but the floating labor-sentiment, which looks askance at both trades-unionism and socialism, yet knows not what to do to make both ends meet, may accept it.

Let the commercialists monopolize that bargaining over wages at which they always beat you. Combine, instead, as Ultimate Consumers, and control the sole source of all their strength, *retail prices.*

To the general public, exasperated alike by the public service corporations and the retail dealers, similar study and combination is advised. Preach everywhere the evils of commercialism, but do not advocate attempts at its elimination by fractional purchase by the government.

Do not expect immediate relief from any source. Expect the situation to get steadily worse until it explodes. But preach everywhere the natural sovereignty of the Ultimate Consumer to step in and rule when that has occurred. Remind everyone of the immeasurable good certain to result.

Free Speech and Economic Reform.—Aside from these generalities, however, there are two reforms to which immediate, active attention should be devoted. These reforms are suggested not because the author is confident of their practicability, but because, if some active reform must be undertaken, these surely come first.

The aim of these suggestions is *real freedom of speech.* If social reform is to be attained otherwise than by violence, certainly the fullest freedom of public debate is a first essential.

Social reform, moreover, is an unending, continuous process. If we are ever to be freed from this endless turbulence of pent-up discontent, this periodic outburst of war or revolution, the first step in its attainment is a much better opportunity than now for the prompt, wide and authoritative advertisement of all grievances.

Yet by this the author is not urging a greater laxity of police-control over the soap-box orator (although a greater constancy of policy would be appreciated). Nor is it sought to extend immunity to the pacifist in time of war, however sincere may be his solicitude for humanity.

As for the soap-box, that is not worth fighting for. Is it not too paltry a medium for relieving the people's feelings, in the light of modern appliances for communication with the millions, to be worth a fight? Fight, rather, for the freedom of our real means for intracommunication—the college and the press!

As for pacifism, any wise advocate of free speech will recognize the contrast between times of peace and those of war. A declaration of war stands as a notice to the world that the era of free speech, as of all other civic rights, is temporarily at an end—*because free speech and civic rights have failed to preserve order and protect the state.* Force must supplant them because there are some things—for instance, an unscrupulous use of force, whether from within or from foreign soil, in disregard of the natural laws governing human association—which the utmost freedom of speech is incapable of coercing.

The first duty of the reformer is to recognize the fact that *an imperfect society is better than none at all.* A mere accumulation of people is very far from being a society. A society consists of a set of institutions—government, laws, etc. Whenever these are invaded the individual, and particularly the millions at the bottom, suffer miserably, from unemployment, famine, disease, violence, etc.

This does not mean that wrong institutions should be accepted in servile meekness. It does mean that mere defiance of government, because one is troubled by a wrong institution, does the poor more harm than good.

Wherever these institutions may be bettered, this should be done. The need for this is perennial. Indeed, we have no volition in the matter. *Wrong forces us to right itself, against our will.* And freedom of speech is aimed at the facilitation of the betterment of such imperfections in social organization.

But war is aimed at the bare preservation of whatever sort of a state may happen to exist, imperfect as it may be; because nothing brings upon all classes such hideous suffering and death as the complete collapse of the state. Therefore it must be preserved, even at the cost of many individual lives and, if necessary, all civic rights.

But a secondary result of every war of recent centuries has been the reform of some major fault in the state—a fault so great that freedom of speech had been unable to correct it. Every clause of our existing liberties has been acquired in this way, as the automatic result of some war or revolution. Every superiority of America over other countries which has attracted millions to these shores has been won by a fight.

For all these reasons, the duty of every citizen, when once war has been declared, is to refrain from criticism and support the government. Then is no time to effect internal reform. That should have been done before.

Real Freedom of Speech.—But what is intended by this present call for freedom of speech is something of far greater effectiveness for the preservation of the people's rights, and the avoidance of war, than is all this irresponsible, unthinking criticism by the soap-box pacifists. What this nation most urgently needs, for the true liberty of the most patriotic and serious-minded, is *the freedom of printed speech in the press, and academic freedom in our colleges.* For without these, the two natural safety-valves for modern intellectual patriotism, to relieve and advertise wholesome discontent with real wrongs and to educate innocent ignorance, frequent social crises are inevitable.

The Freedom of the Press.—As for freedom of speech in the press, that topic was begun in our reference to modern advertising under the sub-head "Periodicals," in Chapter XVIII. We condemned there the perniciousness of allowing our current press to be prostituted to commercialism, as now, by its reliance upon advertisers rather than subscribers for its support.

But what was emphasized at that point—the swindling of the reader when he buys his alleged reading-matter, and again when he buys the thing advertised—is, after all, not the chief trouble, although it is bad enough. The chief detriment to the community lies in the fact that *even the small portion of reading-matter supplied amidst the advertisements is not free to be what the human nature of either editor or subscribers would have it; it must be what pleases the advertisers.*

For the advertisers now pay the major portion of the cost of producing the periodical, with its profits to the publisher. It is but natural, under commercialism, that they should have the right to dictate its editorial policy. They possess the same dominance over the subscribers that the officers and stockholders of a public-service corporation do over its patrons.

Indeed, in the case of the press the subscriber comes out third. First come the business-interests of the advertiser, then those of the stockholders in the publishing-corporation, and lastly the merely human and literary preferences of editor and subscriber.

Because of this artificial distortion of the natural human relationships, the public gets from the press to-day no more accurate idea as to its own literary preferences than it gets explanation of its own economic anatomy from the universities, nor as to the cost of its food, transportation, etc., from the dealers in those things. In each case propaganda acceptable to the money-making powers is doled out to the American public exactly as the Hohenzollerns educated the German people

—to suit themselves. We have yet to learn, through bitter experience, that we are now as completely deceived as to our economic rights, liberties and responsibilities as the German people have been as to their political ones.

Nor has size or monopoly anything to do with this. Just as, in Germany, the pettiest puppet of titled militarism may lord it brutally over the most respectable commoner, so in America, any successful sausage-maker, *if he but have money with which to advertise,* may dictate to our ablest journalists and our most literary subscribers just what they shall print and read. He actually does this all the time. Nothing adverse to commercialism may be printed.

As to belle lettres, the sausage-maker of course knows nothing, nor cares to act directly. But indirectly the commercial system for which he stands, by its maldistribution of purchasing-power, forces into power and prominence those nauseating "best sellers" of fiction which melt into obscurity within six months, and those disgusting "comic sups." of our daily press, against every preference upon the part of the literary world. How this is done was explained under "charging all which the art will bear."

Advertisements Mixed with Reading-matter.—Of all these lapses from good taste and public dignity involved in journalism under commercialism, none is worse than the deliberate intermixture of reading and advertising-matter upon the same page. This is done solely in order to thrust the latter so impertinently into the face of the reader, as candy is tossed into our laps in railway-cars, as to increase his likelihood of buying that for which he has no natural desire.

The editor or publisher who would ostracize a fellow club-member for erecting a bill-board beside the club-links, to advertise his wares, or who affects scorn of "yellow" journalism, yet who, solely for the sake of profits, degrades his own sheet to the extent of intermingling "ads." with news, has furnished as fine an instance of deep-seated inconsistency and bribed hypocrisy as may well be found. He should be black-balled from every professional society and every social club.

It is not expected here that any individual editor is capable of reforming this hideous practice alone. But the least he can do, in professional self-respect, is to denounce the thing, in his unofficial moments, in the severest terms which his pen can command. It is mere sins of omission such as this which have brought on every past revolution.

For if there be any one department of modern life in which the smirching, deforming hand of commercialism is more obvious than in any other, it is journalism. If there be any defect in journalism so great as to hide all others, for the time, it is that due to its being conducted primarily for the purpose of pleasing its advertisers, and secondarily for the profits of its stockholders.

The natural news-sheet—soon to be introduced, we hope, as a first step toward a national factory-system—will publish no advertisements at all, mixed with reading-matter. It will be a pure distributer of news or entertainment. It will be a monopoly. It will be recognized as a public service as important to be kept from the taints of duplication and profit-making as a fire-department, or a water-supply, or an army.

Then, instead of there being, as now, a half-dozen independent publications between which choice must be made each morning—each publishing its own version of all the several sorts of news, in virtual duplication of all the others—the single, salaried, non-owned journal of the near future, a monopoly for its own community, will be published in a half a dozen or more separate sections, each section specializing upon some one line of news, and *containing no advertisements.* One section will be devoted to American politics, another to foreign news, a third to sports, etc. Indeed, one section may be a "Headline Section," containing a brief abstract of each of the others.

In any event, each reader will buy *only those sections which he desires.* When he pays for it he will not pay, as now, for several sections which he does not read, and, in addition, *for the duplications of all those sections in the journals which he does not buy.*

For at present the cost of all is charged against the community, in effect, as a lump sum. If each journal enjoys, as now, only one-sixth, say, of the total circulation, it must charge a much higher price than if it were a monopoly. As in grocery-stores or elsewhere, so in journalism, the Consumer must learn that, under commercialism, *he pays for duplicated effort which he neither demands nor enjoys, far more than he does for all which he actually consumes.*

As to advertising, one of these sections of the future daily journal will be devoted to the announcement of real novelties, of aid and interest to the Consumer in his daily purchases. But these announcements will be far different from present advertisements. They will exhibit these following distinctive contrasts therewith, namely:

(1) Only things which are actually novel will be announced.

(2) Each novelty will be appraised as to its quality relatively to older goods, when announced, by impartial, publicly salaried experts.

This we now have, to a slight degree, in the news-columns of existing journals. But now it is vitiated away from purity of service to the community by two factors: first, the temptation to be liberal as to "news" concerning a thing which is advertised liberally in the paid columns, even if it possesses no novelty or value; and secondly, the danger of litigation in case a poor article is promulgated as such. In the journal of the future both of these vitiants will be automatically eliminated, by the mere absence of profits or dividends.

In addition to the various news-sections mentioned above, the ideal journal must also include (until commercialism may have been abolished completely) an advertising-section—or possibly several of them, each devoted to a specialty, such as "board and rooms," "employment," etc. But these advertising-sections will burden the reader *only if he buys them,* for they will be distributed only for cash. The cost of their publication should be divided between advertiser and reader.

The burden upon the Consumer due to these advertising-sections will be reduced from present standards not merely by their distribution only to those who desire them, but, even when in such hands, by their following features. The "display" of all announcements will be that of the greatest help to the reader-consumer and the best economy of his money. Space will not be wasted. Partiality in prominence will be avoided. An entire page will never be devoted, at great expense, as now, to shouting about some matter scarcely deserving an inconspicuous paragraph, just because someone can increase his private profits by incurring temporarily the cost thereof, and then collecting it from the helpless Consumer. Clarity, brevity and instructiveness will be sought, and *repetition avoided.*

Present advertising studiously avoids all these aims. Above all else, endless repetition of meaningless names is its most cherished habit.

It is obvious that an advertising-sheet thus limited would restrict our most cherished American license, namely, to fight noisily over the Consumer's money at the expense of the Consumer, who "gets it coming and going." He must both furnish the spoils and pay for the cost of the fight. But *this restriction must form the keynote of any adequate program of economic reform.*

As to the relative cost to the public of present journalism and that proposed, two facts must always be remembered in connection with the existing plan, namely:

(1) Whereas the reader to-day pays only a third, or perhaps a quarter, of the commercial cost of his paper when he buys it, *he pays the rest when he buys across the shop-counters of those who advertise therein, or anywhere else.* In the future the Consumer will pay far less when he buys any of the myriad of things which are now advertised in our daily journals, and when he buys the latter he will pay only the natural, as contrasted with the commercial, cost thereof.

(2) The money now spent for daily papers actually pays, even at commercial prices, for a lot of things which the reader does not want. In the future he will not have to buy pages of announcements of cooks, chauffeurs and stenographers wanting situations, when he needs neither cook, chauffeur nor stenographer; nor of sporting-records when he takes no interest in sports; nor of stock quotations when he never dabbles in stocks; nor of emblazoned reminders of various brands of beer, soap, medicines or lawn-mowers when all that he desires is the latest news as to European war or American politics, or the marine news of the day. Not to mention the labor wasted in printing all this unwanted stuff, it is incidentally creating a famine in paper and devastating our spruce-forests by our waste of over nine-tenths of the paper which now reaches our hands.

In the future, what the Consumer wants as to news he will pay for, when he buys news and not when he buys dry-goods or hires a cook; and news he will get, in a purity far above anything possible under the present conduct of journalism primarily for the pecuniary profit of stockholders and advertisers. So far as one may surmise, the average reader of the future daily need not pay more than one cent for the six weekdays, with another cent on Sunday, as his subscription for all the sections usually desired by any one person. Yet he will simultaneously be paying less than now for all the shop-goods now advertised so liberally at his expense.

On the other hand, as to editorials, there is no reason for the present narrow restriction of editorial views, and for the linking of news and editorial policies together. For this forces each reader either to support an editorial policy which he dislikes in order to secure good news, or else to content himself with a poor supply of news in order to patronize editorials of which he approves.

Among the several sections of the future daily journal there will naturally be one devoted to a review of current events—somewhat editorial in character, but carefully impartial, impersonal and quotational in language. This will be edited by salaried men, having no clientele of advertisers behind them. They need not be expected to display especial personal originality. Indeed, this section will be a news-sheet as to the views of others, rather than a purely individual fountain of ethics.

But supplementing this—feeding it, in fact—there should be several independent editorial sheets, each published and distributed by the community-journal, but each displaying the views of some stated individual or society. There may be as many of these as the people will support, the only condition attached to their publication being that the natural cost thereof must be voluntarily supplied by the reader. In addition, for those writers not able nor desirous of making so regular a vocation of the task of self-expression, space should be accorded at cost in the community's "Section of Contributed Letters."

The Modern Town-Meeting.—For the people direly need a printed forum. There is grave and growing pressure for a freer multiplicity of personal views upon public questions. The day when the individual voice, speaking from the steps of the village-grocery or in town-meeting, formed an adequate means for the publication of personal views, is far, far behind us.

Yet the modern news-editorial has not taken the place of these. It reaches the people in vast numbers, it is true; but it is no longer either personal or unbiased, nor sufficiently multiple, as to source.

The views now appearing as editorials in our daily journals are very far indeed from representing the frank, personal views of individual minds, such as built up our best traditions of journalism in the past. Each sheet to-day maintains an editorial policy which is as cold-blooded a matter of design, on the part of a staff in "great headquarters," as is Prussian militarism. This is not saying that it is equally cruel, but that it is equally impersonal. Every man must abandon his personal views when he enters editorial offices, quite as when he enlists in the army.

For instance, the author knows of a wager won by the city-editor of one of New York's more conservative dailies, a few years ago, to the effect that twenty men could be found on staff-positions upon his own and similar papers, all of whom were socialists in the broader sense of the term. *Yet not one of these sheets ever dared to print a single editorial paragraph favorable to socialism.*

That is what is meant by the frequent complaint of the "ownership" of the press by certain "interests." It is not that the editors accept literal bribes to silence. There is no need to offer bribes. They come cheaper than that. So long as a large fraction of the paper's income is paid by advertisers, every dollar of editorial salary is in reality a continuous bribe. To disobey orders from those who pay means losing one's job.

Yet all that is needed, in order to reform all this, is public recognition of the fact that those who pay are not the advertisers themselves, but the Consumers who buy from the advertisers, and the reorganization of our industries upon that basic fact.

Rapid-Transit Journalism.—A natural branch of any such a monopolized, community-owned journalism as has been suggested, working out easily in connection with publicly owned, non-ticket-chopping transit-facilities, would be the publication of the news of the hour upon cards replacing the silly advertisements which now stare us in the face as we ride to and fro. The work of changing these cards hourly would be as nothing compared with the publication of hourly editions of a half-dozen duplicative newspapers, as now, and their distribution to hundreds of competing news-stands; while the public would be vastly better informed, with great economy in time.

The present subway and elevated system in New York City could be cared for by not over a half-dozen card-changing stations, with perhaps two score more for the surface-lines. What novel and ingenious devices for the frequent adjustment of these news-cards, or what optical substitutes for cards, might be invented, as soon as the demand for them was released, may be judged from the marvelous creation of accessories following the public adoption of telephones, automobiles, "movies," airplanes or wireless telegraphy.

The task of keeping our hurriedly moving urban public constantly educated as to the latest news, both political and scientific, is one of the problems now pressing most urgently for a solution. *It is our adults, at present, who need education far more than our youth.* We strain grotesquely, in our boards of education, at the simple task of imparting to minors elementary facts regarding which there is virtually no debate, while neglecting placidly that far more serious and intricate problem of how to teach to that most dangerous of all high explosives known to man—modern congested populations of adults—a self-knowledge sufficiently accurate and incisive to preserve it from periodic social self-destruction.

To the performance of this patriotic task there lies in the way no obstacle which is comparable with that institution which boasts so proudly that it itself performs this service, namely, commercial advertising. For it absorbs unto itself all manner of moneys, facilities and opportunities for teaching the people, yet educates them not one whit—except negatively. Of the many sorts of loss due to commercialism which evade our statistical nets, this educational loss must class as one of the most important.

For the fact of far greater import than this passive loss of wasted effort is that the advertising power of the land stands as a strict and abominally one-sided *censor* of our press. It permits only opinions favorable to commercialism to reach the people. It designedly confuses attacks against the commercial system with attack against the political government, whereas true loyalty to the political government demands immediate attack upon the commercial system, as our worst enemy of political liberty and stability.

It continually dares even to suppress facts. Indeed, the ideas set forth in this book seem radical and surprising *only because* *the people have been systematically blinded for decades by our press and our colleges, both of them harnessed and driven by commercial influences.*[1]

The obviously rapid expansion of periodical publications in recent years has been promoted primarily as a means for distributing advertisements, while disguising to the Consumer the fact that he pays for them. This flood of cheap publications has come into existence in search of a share of the spoils to be won in advertising, and not at all in response to any natural popular demand for reading-matter—just as additional grocery-stores are being intruded where there are already too many. Their offerings of literature have been sagged by commercialism, both in quantity per cover and in literary quality, to the very lowest degree compatible with the maintenance of a circulation big enough to give valuation to their advertising-space. They secure this circulation only because, in the first place, commercialism has diverted undue purchasing-power into pockets not equipped with literary taste, in the second place by creating an artificial pressure for sensational fiction as a distraction from the fatigues of commercial combat, and, in the third place, by *systematically deceiving the people as to the true price, place and time of payment for this reading-matter.*

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[1] This influence is as intangible as it is unquestionable. In regard to the Russian situation, for instance, the author has been corroborated by the spontaneous complaints of other educated, impartial men, in his view that we have been systematically deceived as to the facts by our conservative daily press. Yet it is an omission, not an act, which is to be condemned.

For another instance, the New York *Times,* perhaps America's most high esteemed news-sheet, yet a protagonist of commercialism, publishes on July 10, 1919, the news of New York State's prosecution of the Rand School on the first page, with prominent headlines. On the *18th page* it records the federal government's procedure against sixty-four ''prominent'' citizens of Arizona, largely mine-owners, for the alleged kidnapping, in 1917, of several hundred striking miners and their deportation from the State. On the *28th page* it reports the conviction and jail-sentence of seventeen Massachusetts fish-dealers, for conspiracy in raising prices.

This book has already condemned the doctrines of the Rand School in terms as severe as it can command, in language written some two years before the government's discovery that the Rand School was dangerous. But it regards such offenses of commercialism as those reported in Arizona and Massachusetts as far worse, *because they are the responsible creators of the Rand school of discontent.* Therefore they should receive front-page displays.

Further, it regards the one-sided, arbitrary policy of the various sheets favoring commercialism, in obscuring the issue by minimizing one side and magnifying the other, as worthy to be held up to public scorn as the most responsible and dangerous of all, because it prevents public opinion from protecting itself in the ways in which it easily could, were it informed as to the truth, by supplying adequate remedy before an explosion had become inevitable.

Self-supporting, Self-respecting Advertising.—The complete divorce of news-publishing from commercial advertising *must* be accomplished. To do this the printing or mailing of advertising-matter under the same cover with reading-matter, or the collection of a single price for intermingled reading and advertising matter, or the selling of advertising-matter for more or less than the natural cost, must all be forbidden. The effect of the law must be that, although the advertiser may hire a printer to publish advertising-matter for him, *he must then collect from the person desiring the advertisement the full cost thereof, but no more.*

In other words, the present policy of sometimes giving the advertisements away for nothing—as is always the case when it is thrust upon the Consumer, directly and consciously, separately from reading-matter—and of sometimes selling it to the Consumer under a cover the title of which promises reading-matter, and even then at a price considerably above its natural cost—which price is collected from the Consumer at various concealed times and places—is condemned in all its aspects. If the printer is to continue to act as the agent for the advertiser in collecting its cost from the Consumer, as now, *he must be placed upon a cost-plus-salary basis, like any other public tax-gatherer, and no longer allowed to work for unknown profits.* Or, if the advertiser pays off the printer and then collects the cost of his advertising from his own Consumers himself, he must do so openly and above-board, instead of concealing this cost in the price of his goods. *The Consumer of advertising, as of any other commodity, must know what he is getting, when he gets it, and what he is paying for.* Whether he spends his money for literary amusement, for information as to markets, or for dry-goods themselves, he must be required to pay for only what he gets, when he gets it.

Names.—There are many good people who become righteously indignant over any radical's references to commercialism as "robbery." Yet in reality the term is a mild one. For in robbery the victim is usually allowed to know that he is being robbed. The abstraction is accomplished by a force which is honestly, if brutally, frank.

But in commercialism, in contrast, the money is abstracted just as purely by force, *yet the abstractor is a cowardly sneak.* He uses every sort of indirectness and evasion which human ingenuity can invent, in order to conceal from the Consumer exactly what is being given, as to costs, for a certain price exacted. He collects his money at any time, place or manner which will conceal the fact that it is coming to him. He always claims innocence of any intent to do wrong—in which he is usually sincere—and then takes all the starch out of the claim by his habitual and carefully cultivated secrecy concerning costs, and indirectness as to times and places of payment.

Complete Reform of the Press.—If it were possible to go a step further than the above program and make the entire periodical press a single monopoly for each city or state, or perhaps for the nation, far greater advantages would ensue. For the public ownership of the press has arguments in its favor, lying in the field of ethics rather than of economics, which do not apply to street-railways, or even to food-stores. But this suggestion as to public ownership must not be confused with the far more basic doctrine that *both reading-matter and advertisements must be sold to the Consumer, as such—and to that end must be published separately.*

The Universities.—As to the universities, our present lack of academic freedom need not be proven here. It is too well recognized by all thinking people. Argument against its existence degenerates into quibble. The sole question is: Whence does it arise?

Investigation discloses the fact that its source lies hidden in a most peculiar tradition—a tradition with which we have now become so familiar that we have forgotten to question it. This tradition runs to the effect that *education must always be furnished at less than its natural cost.*

It is proper to call this tradition peculiar, because it is the exact reverse of that which is now universal in the supply of all things other than education. Whereas the price asked for education is always less than its cost, *that asked for every other service or commodity is more than its natural cost.*

Even in the college-town itself, whatever the student may buy *outside the college* costs him far more than it should. In his own home-town and on his way to college this rule is universal. But when he has once entered the college, everything bought inside costs him far less than it should.

The origin of this peculiar policy of the colleges lay in a most commendable desire to make education more accessible to the poor. But its real result, it now appears, has been to make a *good education unattainable by anyone, rich or poor.*

For these two diametrically opposite policies—of charging either more or less than the natural cost—are equally mistaken ones. They are alike in their short-sightedness. For it is the universal commercial policy of charging, not merely more than the natural cost, but all which the traffic will bear, which results *not merely in a constant crop of young men too poor to afford the time for an education, even if given for nothing, but in an abnormally high cost of everything used by both college and teachers.*

On the other hand, the collegiate policy of charging less than cost for the education results in the education's being far inferior to what it should have been, when finally secured by the student's toil and self-denial. For it then develops that the college has been paralyzed intellectually by its policy of unthrift.

The fact that the education is given for less than cost immediately makes of every university, whether endowed or supported on appropriations procured through politics, a slavish dependent upon outside wealth or political favor for support. Consequently it develops always a slave's timidity and a slave's inefficiency. An institution which should possess the utmost dignity of independence, because the leader of public opinion, has been by this mistaken policy artificially reduced to the obsequiousness of a poor relation.

Current expenses can be met only by income from an interest-bearing endowment. Extensions can be made only from donations by the rich. Therefore any scientific attack, however Christian in spirit, upon either unusual wealth or upon interest, as institutions, immediately becomes *"verboten."*

Hence every college-president is forced to descend from his natural dignity—properly superior to that of our highest legislative offices—to become half a beggar for funds, and half a promoter and advertiser. He has to be (above all things scholarly) a successful beggar and sycophant. He must cater to the interests and prejudices of the rich, or else lose his job.

Corruption need not be even suggested. It is bad enough that an office which ought to carry with it the highest ideals of intellectual strength and fearlessness, of devotion to the progress of civilization in its most penetrative sense, of broad faith in all humanity, of altruistic example to the young, of nobility of personal character, and of courageous independence of all criticism or influence—an office which should be accorded jealously a dignity exceeding even that of the Supreme Court of the United States—should be prostituted to the servile task of securing funds.

Look at our college-presidents, as a class! Where do they stand in public influence? Many of them are no doubt making heroic effort to be heroic in a slave's shackles. Their sins are those of omission, rather than of commission. It is what they are not which is the nation's tragedy.

Because of limited funds and of prejudices higher up, the college-president must always be a bulldozer of professors. Hence his faculty must always be pervaded by an atmosphere of servility mixed with petty politics. He himself remains, only upon a larger scale, purely the genus despot, species politician, variety college-president.

In consequence, the entire atmosphere normal to the faculty-room has been degraded from that of free and proud intellectual leaders among men to the timid subservience of a gang of half-fed slaves. Under these conditions it is inevitable that college-professors should be publicly accepted as belonging to that class of semi-fossils which will accept the low grade of pay and limited autonomy now characteristic of their position —intellectual pussy-footers, in constant fear of the trustees, of the president and of themselves.

To-day, as at every past period of crisis, all the able and courageous thinkers have been squeezed out of the universities. The few content to remain, who have eyes with which to see, have been harnessed with blinders.

All this is not merely shameful. It is menacing to the nation. It is sending out into the world each year a crop of young men and women, naturally imbued with the energy and ideals of youth, but with both of these features stunted and perverted by their contact with that petty, sordid atmosphere.

The natural dignity of youth has been disappointed by finding puppets set up to be its leaders. Its faith in human nature has been degraded by contamination with faculty-politics. Its hunger for clear vision into life's problems has been dulled by a diet of intellectual pastry—a larded mass of minutiæ, rather than inspiring wisdom—washed down by artificial stimulants to unnatural effort. It acquires therefrom the shrewdness of the mental guttersnipe, rather than the dignity of wisdom.

There is no finer culture than this in which to breed the germs of later misunderstanding, disappointment, bitterness and revolt—for it is not in the lower classes alone that these are found—than the complacent, dogmatic, inadequate self-sufficiency which now pervades our college-graduates. It is based upon a misconception of an undigested mass of minute facts, upon a complete lack of broad insight into the world as it is, which is far more bigoted and dangerous than sheer ignorance.

For this error in our policy of charging less than cost for education has bred in our universities an academic philosophy and practice which is quite a parallel with that of commercialism outside. *Immediate, visible returns are worshiped.* Ultimate scholarly attainment is decried. The whole university-system has been given over to the inculcation of *apparent knowledge,* at the expense of modest *wisdom.*

As in the outer world, so in the colleges, that alone which will make immediate display is tolerated. In every science of which the author has personal knowledge—mechanics, hydraulics, thermodynamics, economics and sociology—the curriculum is superficial and confusing to the last degree. It is supercrammed with detail, yet lacking in insight.

No fundamental principles worthy of the name are taught. The pupil is drilled, as if to cultivate endurance, upon a host of problems *every one of which will be obsolete long before he reaches the time of life when true education becomes of value.*

For the real task of education is not to teach youth to solve the problems of its undergraduate days; it is to prepare it for solving *those problems which will arise when the student is forty or fifty.* Yet in our universities those basic principles of cosmic truth upon which alone one may rely, when the problems of later life have been met—problems which were undreamed when the student was an undergraduate—have never been imparted. Yet man has never passed through a hideous social crisis which could not have been foreseen and prevented by a conservative, but courageous and timely, reliance upon wisdom which had been basic for centuries before.

For instance, in the simplest of all these sciences mentioned —mechanics—I have never yet met a college-graduate who had been taught even the law of gravitation, as anything more cosmic or universal or broadening to the mind than an acceleration relatively to the earth's surface. In history, I have never yet met an educated adult who had been taught the French Revolution as anything more instructive, or as anything less childishly impossible a fantasy, than that the aristocrats had abused the peasantry beyond all precedent, so that the latter revolted and guillotined the aristocrats.

Yet that familiar picture is a sheer superstition, as diametrically opposed to all the facts of history as any pipe-dream. As an illustration of the degree to which modern university-education is diluted into impotence by false and lazy assumptions, as well as to round out this volume with a lesson drawn from history, it is worth while to include here a brief outline of the significant features of the French Revolution.

The French Revolution.—The first truth to be learned concerning this most dramatic of all social convulsions, as a lesson for modern problems, is that the trouble did not originate at all in any extreme abuse of the peasantry. This is not saying that abuse of the peasantry did not exist. It is saying, and emphasizing, that this was not the cause of the outbreak of revolution.

For the peasantry of France before the Revolution, while unquestionably oppressed to a degree which is revolting to American standards, and worse even than the English poor of that day, was yet far more liberally treated than in any other country of continental Europe. All over Europe to the eastward from France, the condition of the peasantry was measurably worse than there. If brutalizing oppression had been, in the eighteenth century or at any other time, the cause of revolution—which it has not—then revolution more horrible than that in France must have broken out, long before 1789, all over central and eastern Europe.

But it did not. Indeed, after the French revolution had set the example, it actually tried to do this. But the failure was universal and signal. *For all of these countries lacked the real cause of revolution—inventional progress.* At that time France and England led the world in applied science and invention.

Secondly, the French Revolution did not break out in, nor even about, any oppression of the peasantry. It broke out in *a revolt of the upper classes against national bankruptcy at the top,* and not against poverty at the bottom. It was started, not by a mob, but by the Third Estate—*the conservative Wall-Street property-owners of that day*—who had been convened to cure the hopelessly increasing bankruptcy of the throne; while the Paris mob celebrated, happily and peaceably, their new-found hope in the reconvening of parliament after more than a century of its discontinuance.

Then, when the Third Estate had successfully defied the authority of the king, instead of anarchy, an epidemic of spontaneous, legislative and proclamatory reform set in, and spread all over France. *Within three months it had repealed every law, tax and custom which had been oppressing the peasantry so direly for decades.* So far as reform of abuses of the peasantry was concerned, the French Revolution had then and there completed its entire task!

Yet Dr. Guillotine was still an obscure physician in the suburbs of Paris, his grim but humane invention still two years from being born! Whatever cause of popular discontent had lain in the oppressions of the old régime had then been removed. Yet the horrors of revolution then lay *not behind, but in the future!*

Up to that time the only popular uprising had been the storming of the Bastille. But the Bastille was a prison which *had never incarcerated a peasant!* Its victims had all been noblemen, or high and wealthy commoners. Therefore it was only natural that the assault against it should be organized by two young noblemen! Although the mob helped to carry it through, it was distinctly an aristocrat's enterprise; and when it was over the government continued, stably and peaceably for many months, in the hands of Mirabeau. The National assembly was called, under his moderate leadership, to formulate a reform no more radical than a constitutional monarchy!

The Reign of Terror? It was not until *four years later* that the Reign of Terror broke out and the guillotine first became really active—and when a people revolts from below, with exasperation as its motive, it does not cool its heels for four years before acting!

Even then, the Reign of Terror had full warrant for something drastic, for it was forced into being by as dastardly an act of treason, on the part of the king and aristocrats in conspiracy—in inviting the armies of Prussia and Austria, both powerful, prosperous kingdoms, to invade convulsed, famine-stricken France. It was when these armies crossed the border, and not until then, that the word went forth that every person disloyal to France must die.

The people died willingly, fighting bare-footed in the mud and snow, on quarter-rations, like tigers, until the well-munitioned armies of the invaders were driven back. The aristocrats died less willingly, and often unjustly. But between them they burned into the pages of history such a record of the superlative heroism natural to all levels of society, and of *the hideous penalty sure to fall upon all, from disloyalty to a nation's need for growth in her institutions,* as makes crucifixion too mild a penalty for the universities, for their failure to teach this lesson to all our youth.

For they have quite failed to make clear, as stands out from the above review of the most patent facts about the French Revolution, that wars and revolutions are incurred, not through moral, but through *mental,* deficiencies on the part of the people. And here "the people" means those at the top as well as those at the bottom.

The irritating causes lie in *fixed institutions, which remain unchanged while the needs of the times alter,* rather than in individual psychologies. It is neither the snobbish indifference at the top nor the ignorant bitterness at the bottom which causes crises, but intellectual timidity and inertia everywhere.

Responsibility for these defects rests upon those who standardize our ideas, rather than upon those who steer either our morals or our politics. For instance, how can anyone blame the Great War merely upon inherent Teutonic savagery, when the one fact which gave that savagery temporary power over civilization was that *not a university among the allied nations gave scientific, accredited warning, by so much as a week, of the real extent of a cataclysm which had been gathering head ever since Napoleon fell!*

If it had been a distant collison in the solar system, instead of one crouching upon our doorsteps, which had been impending, twenty universities would have corroborated each other in its prediction. But we have no science of sociology, and no sociologists as daring as Copernicus or Galileo.

Inspection for Social Insurance.—Wars and revolutions are rendered inevitable by our mere failure to understand, and therefore foresee, the trend of events. Unsolvable misunderstandings arise from a conflict between those fixed institutions of tradition and law (by which society protects itself as the nautilus by its shell) on the one hand, and upon the other, the constantly changing, growing demands of life due to invention, procreation, migration, etc. This conflict always manifests itself gradually, in submerged unrest and in our statistical records, long before men get to fighting with men. A social structure gives just as many warnings of its approaching collapse as does a bridge, a boiler-shell or a cyclonic storm.

All that is needed for safety from any of these is properly organized, technically educated inspection, with elimination of all artificial inducements to suppress prompt report of findings. But, under our present university-system, it is just as natural for our miseducated society to tumble blunderingly into wars and revolutions, as it does now, as it is for an elderly lady to be startled when a car starts unexpectedly. And it is equally dignified.

It is this organization of the intellectual portion of society for a continual, official, scientific prediction of all social events, maintaining its prestige by its accuracy, and its independence by its constant touch with the people, which is sought here. But understanding and predicting natural phenomena is the official business of a university. *This is where reform must start.*

The Function of our Schools of Sociology.—This is particularly the plain duty of our schools of sociology. The prompt observation of changing conditions, the constant sounding of public opinion through freedom of speech in forums for adults, the careful report of flaws, the fearless indication of rising stress due to special privilege while it is still incipient, the accurate definition of the problem involved, the active spread of all these ideas among the people, and definite prophecy of the penalties which nature is sure to impose upon inaction—

all these are duties for which, if the universities neglect them, *there is no other home in our social structure.*

Yet this responsibility the universities openly shirk. They force these sociological responsibilities to wander aimlessly, as homeless orphans, among ignorant, bitter labor-unions, non-professional investigators like the author, or political parties such as the Socialist—which last really deserves its power because it at least offers the people a concrete program of reform upon a competent scale (however erroneous it may be), whereas its critics offer nothing adequate. But from the universities, in place of a clarion call to a broad, definite standard of economic loyalty, with a scientifically accurate program of action, there comes only an incoherent mumbling of ancient formulæ, and an endless, miserly recounting of statistical minutiæ.

I have heard one of the best educated men in America, holding his undergraduate degree from our oldest university, exclaim in public that he had spent most of his life in unlearning what had been taught him in college. Yet during his lifetime the fundamentals of human wisdom needed for the detection of such truth as there may be in this present book, for instance, have not changed. The author has not relied upon up-to-the-minute data. What this learned man has found to be erroneous since his graduation should have been recognized as such by his teachers, even when he was young, *because of its conflict with the eternal verities.* But no college dares to teach the eternal verities.

The trouble is not that no one is capable of such insight as that. The trouble is that the universities, like every established institution, are too pharisaical to invite the prophets to become its teachers.

For prophets are always uncomfortable people. It is much more comfortable to follow empty forms, suppress disturbing new truth, and protect special privilege, until the inevitable whirlwind has been reaped—and then let someone else do the fighting.

It is to-day as nineteen centuries ago. Jesus of Nazareth gave up his life to overthrow, not an immorality, but *the hideously cruel inertia of a fixed institution—the hidebound, insincere, narrow church of his day.* And the pharisees of to-day control our universities.

It was this university indicted above for unwisdom which allowed itself to incur the unspeakable shame of holding back progress in human thought, in connection with the Darwinian philosophy, through the bigotry of Agassiz and through the exile of John Fiske. Yet now it dares to repeat this ignominy in connection with that greatest problem of modern science—which was emerging even when Fiske was welcomed back as a prodigal son—the economic puzzle!

Yet other colleges are equally guilty. Thus a branch evening-school conducted by another of our larger eastern universities has not hesitated to teach its wage-earning pupils, anxious to become social workers, alleged social science that was childish rot. As to poverty, for instance, it taught that it is "due to drunkenness," and left the topic there.

That poverty is invited by drink is not to be denied. The fact is obvious to every schoolboy. So is its obverse, that drunkenness is invited by poverty. No one needs to spend hard-earned wages and tired evenings to learn such piffle as that. Real wisdom inquires: Whence arise both poverty and drunkenness?

For a university to take money from pupils scarcely able to pay it, for such nonsense as that, or for any of the orthodox economics quoted earlier in this book, is a sheer swindle. There is not a bucket-shop in New York which is guilty of such inexcusable swindling as this; for the bucket-shops absorb money which is knowingly spent in gambling, whereas the university swindles money as sacred as the pennies of children, and wastes time which is beyond price. Whereas the bucket-shop cheats only its patrons, the university cheats both its pupil and the state—for the state necessarily relies upon these young people and their social ideas for its salvation a decade hence.

University-Responsibility to Civilization.—Then the universities fail not merely in their teaching of their youthful undergraduates, but far worse in their teaching of the adult public outside their walls. They not only fail to offer the public anything adequate, but they fail to give even passive encouragement to public self-education. Not only is liberal discussion by outsiders not invited to enter the shelter of the college, but if it intrudes it is arrested as soon as detected. There is not a single college which fairly and frankly debates economic issues, however it may pretend to do so. The author has lectured at most of the eastern ones, and knows.

It is true that they put the various books on social reform on their library-shelves, and then say to the student: "Note all and take your choice. We, your teachers, stand for naught decisive nor constructive." There is not a school to-day, nor any professor acting independently of his school, who offers any positive, adequate attack upon the social problem.

For the great need of the modern adult public is a scientifically guided *forum,* as a nation-wide institution, to replace the town-meeting now no longer practicable. But the colleges have forced this, their own proper burden, upon the churches and the labor-unions. And then college-bred men exclaim against social unrest—as if a ferment could ever do harm except when deprived of proper outlet!

Thus the New York *Times* for February 11, 1917, reports:

> "Columbia University refused last night to allow Count Ilya Tolstoy, son of Count Leo Tolstoy, the famous Russian philosopher and author, to speak at the Russian Night meeting of the International Club, in the assembly-hall of Philosophy Hall. . . . The officers of the International Club, which is better known at the university as the Cosmopolitan Club, had arranged a series of Saturday-night meetings, at which noted men would be asked to speak. The club has about 250 members, who comprise more than thirty nationalties. Each week there has been an address from a speaker of a different nation, and it was decided that last night would be Russian night. Count Tolstoy was chosen as the most prominent representative of his nation here."

On the following day the *Times* quotes President Nicholas Murray Butler, of Columbia University, as saying:

> "We have a rule that if the President, or the head of a department, doesn't want a man to speak here, the speech isn't delivered. If a man has charge of what history is taught here, he has a right to say who shall speak here about history. . . . We have too many people of all sorts coming to the university and making speeches. It has got to stop. Some people have a notion that a university is a sort of lyceum—not so."

The gage thus thrown down we accept. *The very first responsibility of every university, toward those who ultimately support and control it—the people—is that it shall be a lyceum.* And more. It shall be not merely an open, impartial platform, like the forums of the churches, which are responsible only for the maintenance of an ethical background fit for rational discussion. The universities are in duty bound, while permitting the freest debate, to furnish *a positive, accurate and adequate scientific answer to that vast social problem of poverty and wealth which every serious mind agrees can, must and shall be solved*—by reason, if the universities will permit; otherwise by force.

In this reference to force the author cannot be misunderstood, after his earlier quotations from history to prove that wrongs are *never* righted by direct attack, as meaning that he threatens assault upon the university-system by force of arms. What he does mean is that the universities are now involving themselves inextricably, by their mere passivity in the face of heavy intellectual responsibility, in that general crash of the commercial system which, lacking competent action by the universities in time, must soon arrive in the form of a sudden shock for which we are mentally quite unprepared, setting all people, of whatever beliefs, fighting frantically for bare existence, or for the preservation of some remnant of political ideal.

The only simile competent to the situation is the galley-scene from "Ben-Hur." Here Wallace depicts the Roman ship, driven by rowers chained to their benches, as equipped with a director standing at the stern, tediously beating out the time for the strokes of the oarsmen. When the vessel sinks in battle Roman discipline holds the director to his post, as the chains hold the men. To the end his unaltered, monotonous beating continues, until literally overwhelmed by the waves.

It is so with our universities to-day. In sociology they are merely marking time for their chained intellectual slaves. As the impending crash of their master-system, commercialism, approaches, they will continue this unaltered to the bitter end. Heedless of every preliminary warning, their well-disciplined beating of the commercialistic tomtom will show no variation from the orthodox, until overwhelmed and silenced forever by the disappearance of all commercialism.

Is it gradual reform which you wish? Try to get it in our university-brand of orthodox sociology, and see what success you have!

Responsibility for the Impending Economic Crisis.—For, although this book has everywhere emphasized the idea that it is worse than folly to blame any one portion of society for having actively and maliciously brought us into our present perilous position, yet there is, in reality, one group which is officially responsible for whatever world-crisis may impend, however innocent that group may be of having had any active part in its creation. Its sins have been those of omission. This is the professional teacher of political economy, whether he be seated in a university-chair or in an editorial sanctum. He is responsible above all other men for the solution of our social problems, not because he has shown toward mankind any greater malice or greed, nor any less love, than others; but *because he has dared to assume what seems to the author, at the present time, the most heavily weighted robe of office in the land—that charged with the guidance of the rising generation through the intricacies of modern social problems.*

He has dared to accept the custody of our most powerful appliances for influencing public opinion—the press and the college. He has dared to utilize these powerful instruments for the formation of social ideals in the impressionable young. He has dared to accept an office toward which our legislators must turn for guidance, in acts involving far more human life and misery than is controlled by a general officer in active warfare.

During the last quarter-century the universities have been cramming their libraries with untold accumulations of data. During this same period they have been stocking the country with young and vigorous graduates, confident in their acquisition of knowledge, who must necessarily be our reliance for the active progress of civilization, yet whose heads have been congested with as false and incompetent a set of ideas concerning current social evolution as it is possible to conceive.

When the irresistible train of events has brought our social progress into collision with that impenetrable mass of educated ignorance, all of us must suffer from the shock. Over this class the revolution which its incompetence threatens to create will stumble, before sweeping it into oblivion, as the French Revolution stumbled over the Girondins in 1793.

This responsibility for the preservation of understanding, law and order now bearing upon our professional sociologists is greater than that resting upon our military leaders and legislators together; *for we must rely upon our universities and the public press to guide both of these.* Yet, in the face of such a responsibility as that, these men have proven themselves professional "poltroons" (the word is quoted from their own spokesman), in that they have let timidity distort or choke their natural utterance. For I dare not accuse them of such utter incompetence as would be implied by the suggestion that, in the face of their access to untold data, they are unable to discern what is the matter.

"Social Control."—In Vol. XII of the "Publications of the American Sociological Society," reporting its meeting on "Social Control" held in Philadelphia in December, 1917, appears a paper upon "The Social Control of the Acquisition of Wealth" by Professor Hayes, of the University of Illinois. In the course of this paper its author says:

> "The absurdity of our present distribution of wealth . . . [is] . . . illustrated by the rapidity with which property is collected in the hands of the managers of industry. We are popularly supposed to have one billionaire. *There have not been a billion minutes since Christ was born.* To accumulate a billion dollars at the rate of $10,000 a year would require a thousand centuries. . . . Even one of our more moderately successful multimillionaires, who acquires a fortune equal to only 2 per cent of that which Mr. Rockefeller is supposed to possess, has a sum the accumulation of which at the rate of $10,000 a year *would require a longer time than has elapsed since the birth of Christ."* (Italics mine.)

Thus the inequity of modern fortunes and incomes has reached the degree of crass absurdity. In this lies some slight hope of their abolition. Special privilege thrives upon being blamed, but when it comes to be ridiculed it cannot long survive. Yet even with the aid of ridicule, the problem remains of finding a way.

The spirit of this paper of Professor Hayes is among the best to be found among professional debates of social problems, and is well stated in the following language:

> "We believe in very cautious exercise of this new power [of social control], yet we begin to suspect that, with our present insight into economic and social processes, to continue to preach the doctrine of laissez faire is little better than poltroonery and cowardice, and shirking the duty of social leadership.
>
> Unlike mere agitators, nearly all economists and sociologists are in an attitude of extreme circumspection in regard to the exercise of new-found powers of social control. We are not willing to countenance any absurd and premature ventures. But neither are we willing to be poltroons—as the men of Columbus' day would have been if they had refused to put to sea after the mariner's compass had been invented."

In the spirit of this caution and circumspection in regard to *program for action* the author of this book has the highest sympathy, because action is not the office of the student. But in any caution or circumspection or delay in *stating the situation frankly,* there can be found only grounds for disgust. It is sheer poltroonery.

This poltroonery is intellectual, rather than moral or physical, but it is none the less poltroonery. The average professor of political economy, following his president and trustees, shies at any idea larger or sharper than a penknife as an elephant shies from a mouse.

But this sort of poltroonery is no less treasonable to the state than is any other sort. Indeed, it is more so. It is high time that intellectual cowardice be publicly denounced, as even more treasonable to civilization than physical or moral cowardice.

Is cowardice too strong a term? Why, if the American marines at Cantigny, meeting their first contact with civilization's most hideous problem in many years, had thrown down their arms and fled headlong to Paris—there to strut about in uniform and draw their pay as defenders of American liberties—they would not have presented a more shameful spectacle of treason to every American tradition of courage and sincerity than our professors of political economy are now exhibiting daily, by their refusal to denounce commercialism openly and officially! You cannot drag a professional sociologist near enough to the economic enemy for him to find out where and what it is. "Commercialism forever!" he will shout, and then duck for cover, mumbling: "Properly controlled, of course." Yet this does not hinder their posing, in rostrum and national society, as the country's leaders in scientific thought concerning social problems. (See foot-note, page 808.)

We blame the German soldiery for cowardly obedience to inhuman orders. We recall with pride that any American enlisted man, if ordered to shoot down defenseless non-combatants, or to torpedo a liner laden with women and children, would rather mutiny first, and face a firing squad.

But what is it that our professional sociologists are doing? By their present acquiescence in orders to remain silent, or inconsequential, as to the economic problem, they are condemning to congestion in slums, to increasing uncertainty of employment, to rising cost of living—and thus to famine, disease, despair, crime and suicide—or, instead of these, to bitter, cruel revolt—millions where the Huns murdered thousands! Do they dare to confess to the people that, in the face of a responsibility such as that, they are afraid to mutiny against presidents and trustees?

The question is not to be disposed of by pleading ignorance. If ignorant of the remedy, *why are they there?* Or, if no one knows the remedy, *why is not that their first proclamation to the people?*

It is urged that this indictment of the university-sociologists be viewed as something far less personal than any grouch on the author's part against his former colleagues, or than any defect of character happening to find embodiment in the professors. This systematic timidity of our official sociologists is a symptom of our entire university-organization. As such it is a national institution. Its indictment cannot but be painful to those comprising it, but it cannot be foregone for that reason. For there is no feature of the impending crisis so fraught with menace, nor so widely permeating our entire social fabric, as this lack of intellectual courage and initiative among our teachers, in delaying their denunciation of commercialism.

The author knows well what it means to suffer ostracism, neglect, and loss of position and income together, because of heresy. He is the last one to taunt any man for hesitancy in the face of these. But, on the other hand, the man who dares to teach any brand whatever of social philosophy, these days, must make up his mind, at the start, to regard courage as his chief stock in trade. If he hasn't it, he would better quit the business immediately. He would better resign his underpaid, self-respectless job now, announcing his reasons publicly, than to stay and face what is coming, in the way of ignominy.[2]

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[2] In a vague way this lack in our universities is sensed by the general public. Thus in the summer of 1919 the author met an army-chaplain recently home from splendid service at the front. He had traveled five hundred miles from his home, to learn what he could in New York City as to this patriot's task of peacetime, the economic problem. He knew nothing of the author's views except that he was interested in sociology. He asked guidance.

The author suggested that the chaplain would find little help in the universities. The answer came like a shot: *"They're afraid to touch it!"*

This universal, systematic blue funk of those officially responsible as our protectors from social impact and explosion is our one greatest cause for apprehension. For if they fail us, whither shall we turn for help?

On November 21, 1919, the American Academy of Political Science held its annual public dinner in the ball-room of the Hotel Astor, New York City. The topic was "railroad-legislation." The speakers were all of national prominence, representing the several sides of the controversy. The audience was as brilliant a one as America often convenes.

The prime facts brought out were that the railroads, since their control by the government, had run up a deficit in profits (below the average of $950,000,000 per annum attained during the last three years before government-control) of from two to four hundreds of millions per annum. This deficit now aggregated a round billion of dollars!

The central question underlying all pending legislation is how to return these properties to their owners, and when, with this deficit canceled. Mismanagement by the government was not alleged by any speaker; but it was the consensus of opinion that public sentiment does not now favor further government-control or ownership. Only the representative of the wage-earners urged that.

During the accumulation of this deficit rates have three times been raised. Yet the only remedy or policy urged by any of the speakers (except he who represented the wage-earners) was the further raise of rates!

No one in this formal assembly of America's best in professional sociology dared to state that the trouble with railroad-finances plainly lay outside of the railroads, in the advancing price which the roads must pay for every pint of peanuts consumed by them. No one dared even to hint that the railroad-problem was merely one small side of the huge economic problem as a whole—that we have gotten into this

Does Social Control Exist?—For the insistent question now forcing itself upon the reluctant attention of the professional sociologist is this: *"Is there any such a thing, after all, as social control?* For certainly there is no sign of it in the past; and in the crises of the past, human intelligence certainly came as near to understanding its problems as it does to-day, when

terrible situation chiefly because we have tried to bite off little nibbles, like the railroads, and consider them as independent wholes.

No one dared to point out the fact that the situation of the roads, helplessly growing poorer and poorer under always rising rates of income, was an exact parallel with that of labor in every line of work, which is steadily, helplessly growing poorer under ever rising wages!

No one dared to remind this able audience that the problem of the evening was the hopelessly increasing bankruptcy in one of the most fundamental departments of industry; and that it was bankruptcy on high, and not poverty below, which forced the French Revolution onto the pages of history! No one in all this ultra-professional group of sociologists of the highest rank dared to point out that the whole evening's array of gloomy facts—too long to reproduce here—stood as an exact parallel to the struggles of Louis XVI, for a decade preceding the Revolution, to solve his *financial,* rather than his social welfare, problems. For then business-men as able as sat among that brilliant audience in the Hotel Astor tried for years, and in vain, to attain solvency in a moribund system. And they finally ended in themselves springing the mine which blew it forever into oblivion!

The economic tension grows. The railroads vie with the food-supply and the coal-supply in vital importance to the community, and in the hopeless bankruptcy of finance and human satisfaction which they are acceleratingly coming to embody. Yet no one in that most responsible professional gathering had the candor to point out the fact that the underlying cause of the whole trouble was *high prices everywhere outside these industries.*

No person there, either inside or outside the Academy, had the honesty to point out that not a businessman in all that august audience could help raising his prices repeatedly during the recent past, and that he would be still more helpless in that respect during the coming years. No one there pointed out that this promised increasingly hopeless bankruptcy for the railroads, the topic of the evening. *No one there seemed to sense at all the heavy and direct responsibility of those who dare to assume the dignity of professional sociologists for doing all these things, and more!*

Intellectual poltroonery? Treason to the public need? Insult to public intelligence? Or just plain, puerile bunk? Are these terms too strong for such an abrogated responsibility as was manifest all that evening? These terms were not too strong to be passed about the audience and corridors. When *will* the universities awaken to the spectacle they are now making of themselves on the pages of history?

no two educated men can be found who even approach agreement as to what is the trouble, or what the remedy.

Uniformly, up to date, our social evolution has plainly been propelled, guided and coerced quite automatically, by events over which we have exercised not the slightest deliberate control—of which, indeed, we have not even been conscious, until long after they have had their forced effect. Every forward step in social evolution has been forced by unexpected events upon a public reluctant to act. *We have not even been able to foresee, let alone guide or control, the most dominant events of the day.*

After the history of the last six years how can any intelligent, sincere person speak of social control? Where is the professional sociologist, or statesman, or ruler, or party, or group, or school, which, even as late as 1913, foresaw even one of those events which, in gigantic procession, have crowded the pages of history since then? *Yet in 1913 it was already far too late to exert control over them!*

Was it he who apparently instigated and guided the whole inauguration of the war, the Kaiser, the worst deluded mortal of the lot—he who believed that he was merely starting out to cross Belgium and humiliate France, while England weakly fretted and America gambled in stocks? How much conscious "social control" did *he* exert, when he set going events which were to consolidate the entire world against Germany, narrow instead of extend German dominion, and annihilate that military power which the Hohenzollerns had so laboriously and proudly built up, as the soul of the Germany of their day?

Or was it President Wilson, who promised to keep us out of war, who mumbled out the long series of notes regarding the *Lusitania* and other ships, and who delayed our preparation for war until the cause of liberty was all but lost—ending in December, 1916, with his call for a statement of all war-aims at a time when such an act pulled the planks from beneath every belligerent except Germany? Was it he who was consciously controlling social evolution toward the crushing defeat of Germany by American force, and his own formation of the League of Nations, two years later?

Or was it Abraham Lincoln, the most far-sighted man of his day, who entered the White House sworn to abstain from touching slavery (otherwise than to restrict its territorial expansion) and who, sixteen months after the Civil War had started, stated his duty to be the perpetuation of slavery, if that would perpetuate the Union—yet who, *within five months from that time, formally abolished slavery,* the cause of the whole struggle?

Or was it the abolitionists, who advocated from the start the complete elimination of slavery, yet played no visible part in its accomplishment? Or was it the mass of Americans in the North, who mobbed the abolitionists in 1856, yet who, in 1861, shouldered muskets and died bravely for the abolition of slavery?

Or was it, perhaps, the slave-owners in the South, who themselves brought the whole issue to a head, first by adopting the "gag-rule" in Congress in 1836—which, by forbidding discussion, made fighting inevitable—and later by seceding, under the impression that the North would not fight? Or was it, perhaps, the one individual who educated northern sentiment more toward abolition, within a week, than all the Garrisons and Channings had done in thirty years—the Confederate officer who fired the first shot on Fort Sumter—acting, we are told, without the sanction of the Confederate congress?

Which one of these was it, pray, who was exercising the conscious "social control" of his day?

Or was it George Washington, who is on record as decrying any suggestion for separation from England, *within fifteen months of his becoming commander-in-chief of the forces gathered under the Declaration of Independence from England,* who exercised this wonderful modern "social control"? There was not the slightest sign of social control anywhere in our Revolutionary period; yet out of those days arose the most perfect principles of social government yet known to man!

Professor Hayes speaks of this "power of social control" as "new-found." Surely it must be; for never in the past, from any page of early history down to the latest daily news, has there appeared a scintilla of evidence of any slightest control over the progress of the day, by any government, ruler, political party, school, journal, group or individual. *There has not been even the slightest evidence of any foresight as to how things were trending.* The series of events in history have come crashing down upon the heads of the human race—jarred into motion by a host of independent, microscopic actors, each doing apparently non-social acts, quite ignorantly of what he was accomplishing—as unexpectedly as bricks fall upon cellar-rats in a midnight earthquake.

Foresight we may be able to acquire in the future. When we have acquired it, through a real science of sociology, we may pour lubricants upon the pathway of events. We may be able to interpose between colliding interests the cushioning effect of an intelligent public expectation of the outcome. But we shall accomplish nothing by direct effort. We cannot control social tendencies by brute opposition. As Abraham Lincoln said:

> "When you have an elephant on hand, and he wants to run away, better let him run!"

Modern Indirectness.—For modern social reactions are as complex and indirect as those in modern machinery, if not far more so. We may be able soon, by indirect but skillful social action, to release a burst of social energy comparable with the broadside of a modern battleship, which is controlled by the indirect method of pushing a button in the conning-tower. But a sheer power of direct social control, through individual psychology or public opinion, is not promised to us by any past human experience or modern science. To attempt it is as silly as to try to row a battleship with oars, or to hurl its projectiles by hand—or even to discharge one of its huge guns by a match, as was the method a century ago.

The Supreme Value of Candor.—This being the uniform lesson of all history, why cannot we have a frank admission of the fact from those who are officially responsible for teaching the lessons of history into modern problems? This enlightened generation of men, having recently fallen, with the prescience of a blind drunkard reeling into a ditch, into a huge world-war which had been gathering its storm-cloud for over a century—yet quite unwarned by our official forecasters, the universities—now comes crawling out with maudlin mutterings of learned words about the science of "social control!" Bah! Why cannot we have at least the moral courage to admit the fact, and then the intellectual courage to think adequately about it? Are our universities, lacking that humble admission of ignorance which forms ever the first step toward wisdom, to continue in an intellectual pretentiousness which would do credit to a Hohenzollern?

One after another our vast social systems—first the feudal, then the monarchical, and now finally the politically disgregate

—have been forced to succumb, *not* under any conscious, timely reasoning and deliberate design, nor even by direct attack, but by a crashing readjustment of opposing forces of an invisible, subterranean, earthquake character—quite insensitive to public opinion and quite blindly as to any science of social evolution. For foresight, guidance or restraint of any of these things are not only beyond the powers of any existing government, but that scholarly humility which necessarily precedes the acquisition of any such a power is now systematically excluded from the policies of our universities. Now that the signs of a coming huge world-revolution, pivoting upon the distribution of wealth, have become menacing, if not certain, there is not a university in America which dares to teach that poverty is an artificial institution, or that interest and dividends are wrong and unnecessary, or dares to enter the problem incisively in any way, with the unshakable conclusions of the various sciences of material energetics firmly beneath its feet.

The Guiding Forces of Social Evolution.—For it is road-building, canals, navigation, mechanical power, railways, electrical communication, and the whole string of factories and inventions which have followed these—it is all these, and neither any conscious science of social control, nor any parliamentary debate, nor any governmental astuteness—which have forced upon us in the past, in succession, the American and French Revolutions of the eighteenth century, each more fruitful of progress in human government than any other single step in history; the English economic reforms of the early nineteenth century; our own Civil War of fifty years ago, with its final abolition of negro-slavery; and finally this great European War of to-day—to result, we hope, in the formation of that world-government which the intellectual vigor of our universities ought to have forced upon us without bloodshed a generation ago.

Each of these advances in civilization's institutions have been forced upon us *quite against everybody's will.* None came by deliberate intent. And so, at last, it is a quite similar line of purely mechanical invention, done without the slightest intent of social control, which, equally subconsciously and unintentionally, is forcing us into a critical economic condition—one from which we are to be extricated (it appears from the present negative policies of the universities) only by a cataclysm more gigantic and hideous than any yet recorded—but to a resultant advance in civilization as far beyond the comprehension of the day as was the case in each of these past instances.

Dissension the Germ of Revolution.—For certainly there is less evidence of social control to-day, in this now pending economic crisis, than at any earlier period. The one most striking symptom of the times is the fact that *there cannot be found any two educated persons, even among those who have devoted their lives to the study of sociology, who agree broadly as to what is the trouble, or what the remedy*—except the socialists, into whose power our mere neglect to agree is destined temporarily to thrust us. On the side of reform and protest there is nothing but endless, pointless debate. But on the other side, on the side of commercialism, no wordy defense wastes invaluable time; but endless energy of action proceeds acceleratingly to undermine the state, with steadily rising prices and periodic paralyses of employment.

All this means two things: First, that revolution is inevitable, because where agreement over a burning question proves impossible, a fight is the only alternative. Secondly, we fail to agree because we possess no science of sociology. Indeed, of all the misleading positions regarding matters of national importance for which our professional sociologists are now responsible, there is none so mischievous as their assumption that we do now possess such a science, competent to guide us out of our always growing difficulties. For this assumption gives us a blatant cocksureness where we need most that humility which is the foundation of wisdom.

Scientific Superstitions.—Their efforts at the attainment of such a science are paralyzed by their failure to recognize sociology as merely one branch of the great circle of natural, energetic sciences. Just as the ancients were hopelessly debarred from attaining any useful science of astronomy, so long as they believed in the animation of each heavenly body by some deity unhampered by natural law, so we to-day are shackled in our sociology by our insistent belief in the guidance of all social phenomena by mere whim or demagogy, or even by mere suggestion, acting through the psychic nature of the individual as its determinant.

Our present insistence upon the complete freedom of the individual will in public matters, and upon the competence of the individual psychology to explain all social phenomena, is out of all consonance with the now accepted universality of natural law. Until we free ourselves from these scientific superstitions we shall never attain to a modern, scientific, Copernican sociology—accurate in its predictions because based upon unvarying mathematical laws of mass-action, rather than concentrated upon the peculiarities of each social atom; and true because recognizing, as in all the other natural sciences, *relationships rather than individuals* as the basis underlying all energetic phenomena.

University-Militarism.—Thus the trouble with the educated portion of society is that it has weakly forsworn its birthright —intellectual courage and sovereignty. It has abandoned its faith in the competence of reason to solve these problems by reliance upon the supremacy of natural law, and has turned thence to faith in superstitions in place of explanations, and in force as a corrective toward civilization.

The author is not a pacifist. He believes in the use of force when the time for it has come, as the policy cheapest in human suffering. But he believes in recourse to force only after our official guides, the universities, have pursued their proper reliance upon scientific fact, upon principles of universal law connecting fact with fact, and upon incisive analysis, deduction, synthesis and prediction, very, very much farther than has been the case in any recent social crisis.

Without speaking for other colleges, certainly the author's own university, Yale, has recently put into the settlement of the pending crisis with Germany, by force, an amount of effort and courage which, *had it been directed into the only field proper for a university—a scientific prediction—and at the proper time, would have made the Great War impossible.* For if, during the last quarter-century, Yale and her alumni had been devoting even one-tenth of the energy and determination which she is now investing in the cure of German militarism by force, to an equally forceful advocacy of America's voluntary entrance into her proper share in the world's responsibilities, by the formation of a world-government having power to enforce peace—if she had even predicted with unhesitating scientific authority the world-events which all study of past history now shows even the layman to have been inevitable—if she had merely predicted the truth regarding our own country, that it would be sure to fight—then *Belgium would never have been invaded.*

Germany would then have known what to expect; and it is unquestionable that, had she known what was coming, she would never have started the war. Ten millions of lives—a thousand of them sons of Yale—would have been saved!

Yale is not even loyal to herself, not to mention her country. So long as she continues to subsist upon dividends, and to be guided by trustees whose life-religion has been dividends, she will never have more than a boy's comprehension, however fine her vaunted spirit, of the man's meaning of "for God, for country and for Yale." [3]

If Yale were as wise as she is brave—and it is far more her business to be wise than it is to be brave—or if her courage were more of the gray-matter variety, and less of the bull-necked, hard-boiled stamp—or if she were half as courageous and patriotic in the face of social stress at home, as she is under martial peril across the Atlantic—then her attitude toward economic problems would be the exact reverse of what it is now. She would then be insisting upon the most penetrative debate, by her professors, by her students and by the public invited within her walls, of the horrid and obvious inequities and inefficiencies of the commercial system. She would then be doing this with the same obstinacy with which she now discourages anything effective in this direction. She would then be insisting upon her faculty's promulgation of a competent constructive program for economic democracy—or at least, of a social philosophy competent to explain, in consonance with accepted natural law, all major social phenomena now prevailing. Or, failing in both of these, she would insist upon the resignation of said faculty.

Everywhere she would be preaching the obvious fact that, lacking a scientific explanation to which all men can turn for guidance in unity of action, *revolution is inevitable;* for every revolution of past history has been caused by mere paralysis of progress, by disagreement as to what to do in the way of reform. She would be everywhere stripping from revolution both its menace as an event instigated by malice, and its obscure horror as a mysteriously veiled, recondite thing. She would insist upon revealing it in its natural aspect, as a thing forced upon wholesome men by the mere lapse of time, in the face of a failure to agree as to what the trouble and what the remedy—which are the conditions confronting us to-day.

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[3] Yale sends out, in May, 1920, a circular to her alumni calling attention to the poverty of her assistant-professors. Yet for this obvious injustice she has no better remedy to offer than that prescribed by every ignorant trades-union and socialist in the land, namely, *more pay*. She no more dares to preach to her alumni the simple, scientific truth, that (under commercialism) the hardship of her intellectuals must increase with every day passed, and with every dollar's rise of wages and salaries, than she dares to open her doors for others to preach what she fears to hear whispered, namely, that commercialism is as inequitable and inefficient as slavery, and is equally doomed.

Conversely, she would not, as now, be supporting and defending systematically our own American brand of autocratic special privilege and combative waste—commercialism—merely the last among all those which have burdened the progress of liberty down the pages of history. She would not be absolving this big American cousin of Hohenzollernism merely because it is as unconscious of being wrong as Hohenzollernism was, or as slavery was, or as Louis XVI was—while sending her boys out to die amidst its artificial antagonisms. She would not for an instant be tolerating the superficial, unscientific, unpatriotic economic nonsense quoted earlier in this book—which proves acceptable merely because it whitewashes the special privileges of commercialism.

If the presidents and trustees of all these martial universities had taken no initiative whatever in the organization of military resistance to the menace of Prussian oligarchy—if they had given no patriotic lectures, arranged no courses of military instruction, forbidden the use of the campus for military drill, and had failed to co-operate with the alumni in equipping artillery and ambulance corps—which is the exact opposite of all which they did do—they would then have been guilty of a disloyalty to American liberty, justice, autonomy, stability and prosperity not one-quarter so great as that which for years past has sullied their record beyond cleansing. For deep shame has been embodied in their hostile or indifferent attitude toward free, active, accurate, fearless and effective criticism of that commercial oligarchy which is now not merely threatening us from a distance, as Germany did, but which has long been actually undermining America right at home. For commercialism's obscure inefficiencies, its relative famine, its legislative intrigue and its propagandist censoring of the press, all surpass, while they parallel, what we got from Germany in these directions.

For the German peril had cost us, at the time we went to war, not nearly one-thousandth of one per cent of our population. Whatever may have been Germany's intentions in the way of intrigue, she did not possess the ability to invade us. She must work her real evil three thousand miles from our borders—and we ourselves discovered later the physical limitations to that program.

But the commercial menace is in our very midst. Distance presents no obstacle to its operation against our national life. It preys upon our vitals from their innermost cells—where we no more comprehend its poisonous, paralyzing, convulsing office than Daniel Webster understood spinal meningitis germs. It huddles us into congested cities and leaves our country unemployed. It scrimps us in our daily supplies of food, shelter, transportation, information and amusement. It throttles our freedom of speech. It censors our press. It corrupts our education as to its own true nature. It chokes the pulpit's instinctive denunciation of its inherent selfishness. Its intriguing propaganda, however it may sometimes be sincere, is everywhere—and is everywhere degrading.

Its current toll upon our lives (not to mention our fortunes) is measurable in integral percentages of the population —a thousandfold of Germany's most hostile successes. Its final overthrow is to be had—if we may compute from our only past experience with internal oligarchy, in the abolition of slavery—and if we are to lack timely, incisive debate in the universities—for not less than a round ten million American lives, not counting those lost abroad. Of these, probably one million will go by direct violence in the open streets, while the rest die obscurely from famine and pestilence.

Yet within the precincts of our universities, dedicated as they are to wisdom as the prop of American liberties, this dire enemy of our most cherished heritages, diluting when it does not poison every cell of our national life, must not even be criticised, in any way suggesting its overthrow! The true nature of interest, dividends and profits; the paralyzing waste of energy in the gratuitous antagonisms of commercial competition; the morally degenerative deficit in hiring-power due to all this; even the pure larceny involved in surplus—none of these may be accurately analyzed within their auditoriums, before their classes of rising citizens, in even the most scientific spirit, for fear of offending vested special interests, or of jolting uncomfortably those rigid, conservative prejudices which have ever been the seed of war and revolution!

Or perhaps this timidity rests in a fear of agitating public opinion info revolution. Yet their own scientific sociologists should long have been teaching, everywhere, that no revolution of past human experience has *ever* arisen as the result of voluntary agitation, but always merely as the fruit of repression of adequate reform in the face of advancing events—that it has always developed automatically and relentlessly, deaf alike to appeals to come or to stay away!

Poltroonery? Slavery? Disloyalty? Where is the exaggeration in these terms? We have poured them without stint upon the heads of those who hesitated to resist, by measurable loss of life, Germany's aggressive insolence. We have hurled them unhesitatingly at those who were guilty of no greater disloyalty than an inability to see the connection between Germany's invasion of the liberties of Europe and menace to liberty in America. Yet Germany's best endeavor was but puerile impotence in comparison with the effectiveness of American commercialism—the subconscious action of the cream of the brains and energy of that nation which never yet has been beaten.

If Yale were really that center of both wisdom and patriotism which she pretends to be she would now know with certainty, and would be predicting fearlessly, that, lacking prompt organization and drastic action by the hundred million Ultimate Consumers, guided accurately by the universities, her sons will soon again be fighting valiantly for world-democracy and liberty. But this time the fight will not be upon foreign soil. It will be in the streets of our own cities. She would know and say that the responsibility for that fight rests not upon those who predict its necessity, but upon those who, neglecting all preparedness by ignoring the relentless growth of the sole cause—commercialism—make timely preventive action impossible.

This coming battle will nominally be for law and order, between a dozen factions, each denouncing the policy of the other as treason. Largely, also, the fight will be for food and shelter—for milk for the babies, and fuel and safety for the mothers. But just as, in the Civil War, the nominal cause (secession) was merely the cloak for the real cause (slavery), so the true cause of the coming battle—commercialism—will be equally disguised.

Really the fight will be to overcome a three-headed enemy. First the economic injustice and inefficiency of the commercial system. Secondly, the obvious ignorance among the millions whom it has oppressed. Thirdly, the disguised ignorance of those whom it has benefited, the nominally educated man. For our direst menace lies not in the second class, but in that mental unpreparedness which lies embodied in the crass misconceptions of social anatomy and reaction, now universally cherished as superstitions among our college-alumni.

Of these three evils the last has been created directly, and the first two have been fostered, by the systematic subservience in spirit of our universities to the philosophy (or bigotry) of organized wealth. This, with its resultant intellectual paralysis, must continue so long as our universities continue to subsist upon dividends from endowments, or upon gifts from wealthy alumni, instead of upon fees for instruction.

Let it never be forgotten by any loyal Yale man that the Yale men of the near future, many of them now in knickerbockers, will then be fighting desperately (and temporarily a losing fight)—if every precedent of past history may be trusted—to secure a peace, prosperity and public stability *which never can be had until those very commercialistic doctrines which Yale is now actively circulating, sanctifying and fortifying have been so ground down into disproof, by the automatic procession of events, that never again will man dare to suggest their revival!*

Warrants.—If these criticisms of our universities, as to their science of sociology, should be regarded as unnecessarily acrimonious, it must be remembered that the issue at stake is no mere academic quibble. Judging from past history, it involves more life, property and human misery than did either the Civil War or the Great European War. The issue is really one of loyalty versus treason to civilization. The conflict which hangs in the balance, pending decision by the universities whether they will assume leadership toward liberty or not, is a world-wide, international, civil war such as has never before blazed the pages of history, in similar magnitude, although many a time it has recurred in kind.

Modern Patriotism.—Of course, as individuals, both professors and editors can do little to reform our economic institutions. But as professions they can do much to cultivate the one requisite for minimizing the misery of revolution—*mental preparedness on the part of the public.* For if we had space here for analysis of other social crises, in all lands, it could be made plain, and it would be emphasized, that the bulk of the suffering involved in each of these *arose neither from the loss of the old régime, nor from the imperfections of the new, but solely from that interregnum of anarchy which was made inevitable by the fact that the old was allowed to collapse in the midst of a public opinion quite unprepared for the shock.* This deficient public opinion did not know in advance that the old was obsolete and bad, and that all classes would be better off without it. Hence it first opposed blindly and tyrannically all critical or effective debate. Then, when the old régime had exploded automatically in its hands, and left the people adrift, they clung to its dead fragments with the energy of despair, unable to imagine life without it.

This defective public opinion had not been equipped for knowing even in which direction lay the path to a newer and better system; and so several cruel, futile years of experiment, with innumerable half-hearted, belated endeavors at puerile plans for reform, were always allowed to eat up the stores of food and scatter the traditions of law-abidance. Thus nothing effectively constructive could be accomplished until after the naked horrors of anarchy, famine and pestilence, brought on by the economic inadequacy of the many mistaken and short-sighted reforms—together with the exasperation of ill-advised and treasonable efforts at the restoration of the old régime—had finally brought the people face to face with the one plan, as the only thing possible, which reason should have dictated peaceably from the start. This has always been the complete abolition of that inhuman system which men had been trying to keep alive for years, by nibbling adjustments called reforms.

It is the responsibility for the avoidance of all this which now rests so heavily upon our professional sociologists, wherever they may abide—in university, editorial den, legislature, commission or court. Let civilization now pray again that it expects every man to do his duty.

Therefore this is the first patriotic duty of every editor and professional sociologist, to be carried out as his individual judgment may dictate: To teach everywhere that commercialism is obsolete, inefficient and unjust, and that it must go; that everyone will be vastly better off when it has gone; and that its place must be taken by an economic democracy based somehow upon the natural sovereignty of the Ultimate Consumer. With these essentials once understood, both the endless problem as to details and the unavoidable shock of any change in system, will sink into innocuous side-issues.

To this end each of these professions should long ago have united in a declaration of independence of speech such as no power above them would dare to deny. Failing in this duty, there must always be visible upon their professional togas a huge stain of blood, cowardice and shame.

Governmental Safety.—Why, just look the situation in the face! Let us imagine that, when this country discovered that it was really involved in the German peril, it had simultaneously discovered that every American university and every American newspaper had, for decades, been pecuniarily supported and controlled by the Kaiser's intriguing secret service. Would not the prospect have been appalling? How could we have dared to hope for victory over Hunnism, when it was aided by such allies as that!

We cannot even imagine how terrible and humiliating such a position would be. We should be forced to recognize, too late, that our whole body of adult educated men and women had had their ideals molded by the philosophies of Dernberg. Our entire population would be receiving its daily impressions, in school and out, through the eyes of Prussian militarism.

There could be no anti-German editorials. The news would all be garbled to picture Germany as the aggrieved innocent, as all our conservative press now depicts commercialism. There could be no military training against Germany in the men's colleges, no student automobile-drivers, and no nurse-and-ambulance units from the girls' schools—except such as aided the enemy.

Yet such a situation, inconceivably helpless, perilous and humiliating as it would be, is not one whit worse than that which now confronts us. For now that we have identified commercialism as the enemy of modern civilization, the source of all our unrest and instability (with its unconsciousness of the fact having no bearing whatever upon the fact itself), it simultaneously appears that *commercialism controls all our universities and all of our periodical press!*

It controls our universities through the endowment-system. It controls our periodicals through their subsistence upon commercial advertising-matter, rather than upon subscriptions. And in each of these directions this controlling influence is now being extended acceleratingly, beyond any possibility of control by the ballot.

Educational Reform.—All this prostitution of our educational tools is fearfully, menacingly wrong. We must have universities which are directly in touch with the needs of the people, rather than guided by that spirit of aristocratic tyranny which always accompanies the influence of money. If we are not to have a revolution of blood, dynamite and rapine in our streets, we must first have one of methods and men in our universities.

Yet the only step needed to accomplish this result automatically is some federal action requiring all educational institutions to charge for their tuition *its full natural cost, and no more.* This cost must include a margin for undivided profits, and from this profit all extensions are to be made. Gifts may not be accepted. *The ethics relating the college-president to the wealthy alumni must be guarded as jealously as those of a judge on the bench toward the litigants.*

To debate the ramifications of this proposition is of course impossible here. It is enough to say that, with this reform effected, a school of social philosophy must arise automatically which is competent, not necessarily to control, but at least to predict, to guide and to forefend us from cataclysm. We should then have a scientific authority which statesmen and legislators must respect, as navigators respect astronomy.

Indeed, under the influence of such a science *legislators would then have to be trained and licensed,* exactly as a physician must now be certificated by a medical school. We demand this of the physician before he is permitted to take into his hands even a few individual lives. Yet we now permit mere politicians, ignorant of all the natural and social sciences, to pass laws which affect hundreds of millions of lives! Is it so remarkable that we should experience frequent social convulsions?

We do this because no person of discretion to-day places any faith in the ability of the existing schools of sociology to do aught except confuse, mislead and delay. This is so because our universities rely upon interest and dividends for their support, because they think that they now possess a science of social control, and because they see no causative social force except the individual psychology.

We are a long, long way from realizing wherein lies true democracy, or why we do not now possess it.

The Greatest Question of the Day.—Yet, finally, after offering in all sincerity these two suggestions for reform, looking toward the only conceivable first steps in any gradual abolition of commercialism and the cure of our social problem, the author now considers it his solemn duty to raise the very serious question as to *whether either of these suggestions for freedom of speech can be realized.*

This is very far from being said as a joke. It is the grimmest of earnest. For the reader's attention must be turned then to face the awful question: If these elementary reforms be unattainable, *what does it mean?*

For here is a modest test-case. Freedom of speech in press and college is certainly an elementary right to be expected from that democracy which assumes to lead the world toward political liberty. It is certainly the very first pre-requisite for the attainment of any deeper, wider and more vital, but also more intricate, reform, such as the cost of living, or the right to continuous employment. Yet now we do not possess this elementary freedom of speech, and there is grave doubt whether we can attain it!

Therefore, let us obtain this freedom immediately; or else, failing that, let us learn the invaluable lesson which failure must teach, namely, that *we now wield no sovereign control over the means and methods of expression of our public sentiment.* Also, if that be true, that *we have already allowed to slip from our grasp our only weapon against the aggressive growth of commercialism.*

Let us find this out soon, and have it understood. If our organization of the Ultimate Consumers can accomplish nothing more than this, it will have done yeoman's work for economic liberty.

For if we really possess none of these rights and powers—if we have not now the ability to reform by rational, gradual, peaceful methods even these minor abuses of commercial influence in college and press—then we surely have no ghost of a chance at controlling those vastly larger and more powerful commercial enemies which now hide themselves behind these delicate skirtlike ramparts. Let us either free our colleges and journals from this underhanded grip of commercialism, or else let us confess frankly—and lay our plans deliberately upon the fact—that *commercialism is already stronger than the popular will of "the free and the brave."*

For unquestionably commercialism is daily growing more powerful. If we cannot cage it now we shall never be able to do so. Take most careful counsel as to this. It is the biggest issue of the day.

This warning is addressed particularly to that (quite unintentionally) dangerous class of public opinion which believes that the social problem is now being gradually solved, or is capable of some gradual, peaceful solution. This class is ultra-dangerous because *it delays until too late its recognition of the inevitable.* It insists upon believing that the fire which has spread for seventy-five years, up to yesterday, will go no further to-morrow—that the horribly sizzling slow-match will go out before it reaches the magazine—until there has been forced from fate a disproof of this philosophy in the form of ten million sacrificed lives, and untold human misery.

We repeat, we emphasize, we urge—it is time, *time,* TIME which is the vital factor in social reform. That which can be done peaceably to-day will bring revolution if delayed until to-morrow.

Recent Social Evolution.—The unquestionable facts of recent American history established by the data analyzed by this book are these:

(1) That commercialism, both as a legal institution and as a popular tradition or spirit, is a purely destructive, retarding and demoralizing force in social evolution. It is not a sort of individual, different from the common run of American citizens, which is to blame; it is merely a class of occupations.

(2) That commercialism may be defined briefly, for the purposes of summary, as the owning of things which one doesn't want, because someone else wants them.

(3) That there is no department of modern activity now equally large, nor to which is being devoted so huge a proportion of our economic energy, as commercialism. Although we had considered ourselves as peculiarly a nation characterized by gigantic development of factory-production (including in this term farming, forestry, fishing and transportation, with mining and manufacture proper), yet our growth in devotion to commercialism far overtops both this and also the second line of progress supposed to be peculiarly characteristic of the age, namely, technical and scientific attainment. It overtops them in rate of growth not only when either is taken singly, but when they are combined.

(4) That there is now no other department of social evolution in which the rate of growth is being so rapidly *accelerated* as is the case with commercialism. This is the indubitable sign of the unavoidable approach of a crisis. If the rate of growth were declining, as we advance, gradual reform might be surely expected. If even the rate were remaining constant, there might be hope of some new aid to its reversal being devised with time. But where the rate of growth is steadily and increasingly accelerating, there can be but one termination of the process—cataclysm.

(5) That this accelerating growth of commercialism finds its expression in three dominant directions, all of them destructive, namely:

(*a*) The migration of individuals out of the productive occupations into the more lucrative avocations of owning, buying and selling things which the owner, buyer or seller does not want;

(*b*) The endless accumulation of our per-capita burden of interest-bearing securities, with other forms of principal-valuation, upon all of which the Ultimate Consumer must pay interest in each shop-counter purchase;

(*c*) The consequent relentless rise in average prices.

(6) That no policy yet put into practice, nor any even suggested upon paper, has been competent even to hold down any one of these accelerating symptoms of commercialism to a constant rate of growth, and thus prevent their complete

domination of our civilization. Most of the reforms currently advocated do not even recognize these things as their legitimate target. Therefore we say nothing as to the further task of arresting this growth entirely, and then reversing it into a gradual, and ultimately complete, reabsorption by the body economic. In the light of past and recent history any such a process is inconceivable.

(7) That nowhere in any assemblage of educated people, imbued with a Christian determination to find a just solution for the economic problem, can be found *even two* (outside the Socialists) who agree as to where the trouble lies, or what is to be its remedy. Everywhere is endless disagreement, even among those best accredited with ability to see clearly. What, then, is the hope for understanding and agreement among the masses?

We clamor continually for better education of the people—or else assure ourselves that we are already too well educated to have a revolution! Yet we disagree totally as to what the people should be taught!

Yet this fact alone spells revolution. For revolution occurs only when a nation, from the novelty of the situation, *cannot agree what should be done in the face of a growing crisis*—and so delays action until explosion has become nature's only possible method of readjustment.

Over the Top.—With these basic facts of modern social evolution once properly supported, as has been done above herein, the responsibility of the student ends and that of the man of affairs begins. Up to this point the reader's mind has been led. From this point forward he must think for himself, before he acts; and he must act promptly and decisively.

But most people, judging from every past crisis of history, would much rather act without thinking. They not only prefer to suffer and die, but to do so actually at great cost of physical exertion, rather than to avoid the crisis by timely, incisive, courageous thought.

Now the issues of the day will soon give them a fresh chance to exercise this option. Whether we wish it or not, we must now all enlist in the growing internal economic crisis. We are conscripted by fate.

Those among our readers who have lived through the intellectual training-camps of university, trades-union and forum, or have heroically endured the drill-tactics of all the statistical data quoted above, until this page has been reached, have now traversed the last communication-trench of scientifically stated fact. They must next go over the top, with their lives entrusted to their ideas, into the no-man's-land of civilization's forward thrust against that perennial, ages-old, multi-costumed enemy of liberty, happiness, stability and progress—*autocratic special privilege*—but now appearing in a quite novel disguise.

For this, indeed, has ever been the method of war's ambush of advancing civilization. The Americans of 1775, or the French of 1789, or the Northerners of 1860 or the Europeans of 1914 have never recorded in history their possession of any clearer insight as to what threatened them, than do the sociologists (professional and otherwise) of to-day. All of these issues of the past, we think, must have been perfectly clear to their contemporaries; but it was not so. They floundered as blindly into the trap which set off the mine as we are doing now.

The Prospects for Reform.—In this issue now rapidly coming to a head between the public of Ultimate Consumers, on the one hand, and the commercial-autocratic oligarchy of business-anarchy on the other, the ideas set forth in this book may not arouse instant enthusiasm, but they will endure most permanently. Because they are addressed to the rights and potentialities of the as yet unorganized millions of economic sovereigns, they will be the last to be recognized and adopted.

These doctrines attack no class nor group nor individual, but condemn only wrong doctrines, systems and traditions. They indict institutions rather than the puppets misled thereby. They appeal to no partisanship, but rather to all parties and classes. They truckle to no interests. They promise no immediate nor easy results.

They condemn as a worse than futile waste of time all such alluring, plausible plans for fragmentary reform as the "regulation" of corporations, the income-tax upon swollen fortunes, the alleged sharing of profits with wage-earners, the single tax upon land-values only, the purchase of fragmentary commercial properties by issues of government bonds, the organization of the wage-earners in search of a higher wage—whether to be attained peaceably or by violence—or the fractional organization of even the Ultimate Consumers into petty, local, half-commercial and half-socialist, and therefore futile, so-called "co-operative" societies. They regard the enforcement of the federal anti-trust law as still more mischievous than any of these, because, so far as it accomplishes anything at all, it is a step backwards, toward that decentralization which constitutes our real enemy.

Instead, these doctrines rest solely upon reason and justice as to ethics, upon thoroughness and accuracy as to science, upon the unity of all economic problems, and, as to politics, upon the automatic inclusion of *all* classes of individual in the non-partisan organization of *all* Ultimate Consumers for simultaneous, penetrative, effective action. While completeness is being attained—until a majority of the Ultimate Consumers, united in purpose, may exercise actively their inborn economic sovereignty—this organization is to work merely for public education, and not attempt impracticable, incompetent reforms.

Modern Patriotism.—Doing all these things, these doctrines ask of the citizen that highest and most courageous form of patriotism, namely, *to act before the crisis has become acute, in an endeavor which lacks the zest of a partisan conflict.* Doing all these things, these doctrines will be the last, and therefore the most permanent, to be adopted.

God grant that they may be adopted through reason, before the situation explodes, rather than after a further exhaustion of international civilization by bloodshed, arson, famine and disease, brought on by simultaneous internecine strife in all countries now oppressed by commercialism. For such has been the result, in every past crisis of history, *inevitable from delay.* Wherever a people has wandered gropingly, timidly, as we are doing now, through a series of half-hearted, short-sighted social nostrums—a series prolonged as long as anyone can suggest any new measure inadequate to the real trouble—they have always reached finally those doctrines which later aftersight has approved as right. But they have done this only after the painful failure of every other experiment conceivable. Success has been attained only at a date so unwisely postponed that *meanwhile the exploding magazine of autocratic power had been crammed to its eaves, before being detonated.*

True Optimism.—But, if this thoroughness of this book's methods may have been disappointing, in its drastic overthrow of comfortable delusions as to immediate or gradual reform, it has brought us a far deeper and more abiding consolation.

For these uttermost conclusions of cold-blooded economic science —starting from the just premise that to each man must be conserved that which he produces, and guided therefrom by unfeeling tables of statistics—have landed us finally at a realization that the bulk of those ugly defects in our civilization which we had supposed to be due to man's inherent wickedness, are really the manifestation of mere faults in his social organization. And social organization is a thing which can be changed very rapidly, without awaiting the ages-slow development of the individual, and without that cruelty which has always attended attempts to force the reform of the individual, for the sake of others, toward certain ideal standards.

If this study has landed us face to face with an all but inevitable world-cataclysm, and plunged us temporarily into gloom from the fear thereof, it has also brought us the assurance that the cataclysm, if it comes, will lift us within a decade to a height of social evolution which a century of misery, unrest and debate would not attain—into an economic democracy knowing no congested cities, no slums, no ugly factories, no strikes, no involuntary idleness, no white slavery, no impertinent advertisements, and very little tawdry display. It will give us cities like world's-fair grounds, surrounding country as cultivated as a garden (where now lie waste spaces, untilled forests or unused farms), restaurants of quiet excellence (whatever the grade of price), theaters of real drama, concerts of real music, and everywhere falling prices for all commodities and rising estimates of all human worth. Art, science, literature and craftsmanship will then receive what now goes to intrusive salesmanship and sordid finance. This, if it cannot be had through rational foresight and courageous action in time to prevent, is worth a cataclysm.

True Social Science the Handmaiden of Religion.—More than that, this line of analysis has now landed us, in spite of its cold-blooded start, at a warm-hearted corroboration, in our secular platform of social duty, of the simple, all-sufficient moral rules for life uttered nineteen centuries ago by Jesus of Nazareth. For this secular, scientific platform finds us our duty, *even if we be selfish,* among the unseen multi-millions, instead of merely in justice to our visible neighbors. It promises us inconceivably greater prosperity than now, but *only* *when each has agreed to embody in our national constitution his stewardship as his brother's keeper.*

It bids us, if we would be prosperous, to take far less heed of what we shall eat and what we shall wear, but far more heed of what our unknown fellowmen are to do in those lines. It bids us incorporate this principle in our national economic constitution. It bids each of us, poring over our ledgers to count our gains, to remember the basic law of life—that *no man, not even the Christ on the cross, can save himself;* and that, if he neglects to save others, he will surely lose himself—body, purse and soul together.

The lesson from this study bids us regard all the flotsam of our great cities not as life worthless in itself, but as good, valuable life which has been artificially degraded. It bids us welcome each additional atom of life, whether of slum-babe or of immigrant, as of indubitable economic, as well as spiritual, value to us all. It bids us organize our economic system in the same spirit in which our every hospital has been organized—upon the principle that every atom of life is invaluable.

It bids us teach that for all our social ills *no individual nor class is to be blamed.* Our trying situation is the natural result of an evolution to which all have been contributors, in a fluid intermingling of causes and results wherein no blame can be accurately traced.

These facts prove that the uttermost goal of material science is merely to corroborate, by its translation into the language of exact quantities, applied to modern problems, those maxims of generous hope, love and faith, toward God and man, which were addressed to the shepherds and fishermen of a simple folk of long ago. If it has staged a world-revolution as the next act in the human drama unrolling before our eyes, it has also pointed out a divine purpose of great good toward all mankind as the stage-manager behind the scences—a good greater than we can now picture to the imagination. The Nazarene himself predicted the downfall of Jerusalem, then regarded as the holy foundation of the world.

This modern Baconian philosophy teaches that the old individualistic philosophy—holding that each can and should look out for himself, and therefore basing everything upon the psychology of the individual—seeking therefore some egotistical, self-conscious, heroic "superman" as alike the goal and the solution of all man's pathetic strivings—is now as discredited in modern scientific sociology as it was nineteen centuries ago in the philosophy taught from the cross. It is as unamerican and unchristian as it is distinctly Teuton, in its line of thought.

Modern invention, enforcing congregation and specialization to the last degree, has now compelled us to be collectivists in fact, whether we will or not—has compelled each of us, most reluctantly, to work in some degree for all. But as yet it has accomplished this in only a narrow, subconscious, short-sighted sense.

Modern science should teach us to accept that fate in a broad, willing, intelligent, far-sighted way. Modern religion should teach us to welcome it lovingly—should teach us that a so-called Christianity which confines its charity of spirit to only those whom it can see, and *its faith in mankind only to those who do what we think they ought to do,* is a crass pharisaical selfishness. It should never let us forget that the pharisee of Jesus' day typifies the conservative of every age. Jesus was, in all things, a radical.

Modern Sociodynamics—Evolution versus Edict.—A century ago Sir Charles Lyell fought the good fight, against the bigotry of his day, for the first faint recognition of the modern concept of geology as an evolutionary science—for a natural concept of the inanimate world of mountain, plain and sea as a thing which had grown naturally, through the past action of forces which are still engaged in molding it daily into new forms. Then he had to contend against the established superstitious beliefs of that time, in a world which had been created completely within a week, by the edict of God, as contrasted with the modern idea of slow, interminable growth, guided at all times, past and present, by that immutable natural law which forms the modern concept of a loving God.

Two generations ago Darwin and Huxley, in England, and John Fiske in America, were fighting the parallel battle for the modern idea of the evolution of the world of animal life—a battle really started by Lamarck, a century earlier—fighting the active opposition of Agassiz, at Harvard (which university exiled its graduate, Fiske, for his radicalism) and at Yale that most exasperating of all the obstacles to the progress of civilization, mere passive, indifferent, mental inertia.

Thank Heaven, those fights have now been won. Virtually all educated men believe in the evolutionary origin of the world about us, in both its inanimate and its animate individual aspect. But now it appears that the long, bitter battle must be fought all over again, in the fields of sociology, because virtually all educated men still believe that society has received its present form, and can continue its future growth, only by the operation of sheer individual edict, sanctioned by incorporation into statutes, but untrammeled by supreme natural law.

This is the burden which we have inherited from our past lack of even political liberty. Our fight for political liberty has been so dire that now that we have attained it we believe that it has solved all problems. Because our social edicts now come from bodies of democratically elected representatives, we believe that they must be competent beyond question—that they must be potent to prevail over all obstacles, whether they be in accord with the subconscious natural laws of human association or not.

There never was a greater mistake. Our progress is now being paralyzed, and the stability of our entire international civilization threatened, by our rigid faith in the narrow idea of a society molded dogmatically by the sovereign edict of the people, when expressed solely through *political* channels. That we may and must rely upon such democratic guidance in our *economics,* before we may find peace, is the lesson of this book. But it is also its emphatic lesson that economics and politics are independent, incompatible fields of energetics, and that both are subject to relentless natural law.

Until we can escape from that superstitious faith in the power of social edicts, when unharmonized with those huge, subconscious forces of economic evolution which now overrule, suspend, abrogate and reverse the intended action of those edicts—until we can escape from that to a modern concept of social growth as a subconscious result of mathematically definable and relentless evolutionary laws, consonant with all other laws of mass-action and form-evolution—we are doomed to endless social turmoil, conflict, paralysis, and periodic explosion, with their unspeakable misery for all classes of individual.

The paganism of the first century—worst enemy of the happiness and progress of that day—believed in a world of planets, clouds, lightning, trees, etc., each of which was guided, inspired and moved by a deity which *acted quite by whim,* unhampered by any law. The paganism of to-day, peopling our brains with a crew of grotesque fantasies as unreal as was ever evolved by classic superstition, believes in the equally unhampered, heroic autonomy of the "unconquerable superman" within each one of us, as alone the motive power and guidance upon which modern civilization must rely for the solution of all its problems and the conquest of all its tragic and pathetic miseries. This, they believe, is therefore the thing to be cultivated at all costs.*

Yet now cold-blooded science unites with warm-hearted religion to deny all life or power to any such a graven idol. The whole history of Christianity and science combined proves its impotence. Poor helpless, soulless dream, of heroic individual supremacy over life—a dream as unable to fly as a Pegasus, as impotent in fight as a unicorn!

The earlier superstition led man into such acmes of cruel lust and bloodshed that we like to regard them as now long past forever—or so we did before 1914. The second superstition has led us, more recently, into all those narrow ideals of self-salvation rampant from John Calvin down to the conservative orthodoxy of the latest hour—producing prigs rather than well-balanced men, and staining the annals of the church with blots of pharisaical self-righteousness. Still more recently it has led us into the hideously idealistic *kultur* of the Prussian militarists. Now finally it is leading us into the standards and philosophies of American commercial militarism—and its natural child, conscious anarchy—together destined, we believe, to prove the most cruel superstition of all.

A true civilization—one headed by standards of higher education really fit for the responsibility of leading such a civilization, and competent to maintain peace and prosperity—must purge itself of all these. It must stand unwaveringly for an unrestrained social evolution which walks obediently before the

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* This cheap popular superstition reverencing the ideal of a ''superman'' is one of the most poisonous of the insidious social toxates which we have derived from a literature written and published for dividends' sake. In the sagging of literary quality ''all the profits will bear'' this superman-idea has been found of great value in promoting sales—a species of autointoxication from which not even the most worshipful of our dramatic critics has been able to preserve himself entirely.

Christian God of love and mercy with the bold courage of the martyrs, and humbly before His immutable, mathematical, automatic laws of economic evolution. It must scourge out the impotent arrogance of "superman" individualism, born of education by rote from memorized text-books, equally with the license of those who change money in the temple of the people's life-support.

The Dangers Lurking in Profitable Special Privilege.—When, in another volume, to be entitled "The Evolution of Social Crises," we shall have considered the dangers from which the past experience of nations other than our own should warn us, it will appear that the first law to be memorized by the student, reformer, statesman or sociologist—merely in order to be scientific and accurate, as well as just and wise—must be: "Recognize instantly the beginnings of any autocracy of special privilege, however strange in form it may be; but blame no class nor individual for any social evil. Recognize the sole responsibility of merely archaic and outgrown, but not yet abandoned, *institutional relationships,* for all collisions between will and will and for all deformation or degradation of the human ideal."

In this way make every effort to keep down to its minimum the deadly *social lag*—the delay always intervening between the demand for new institutions, created automatically by progress in population, exploration and invention, and nature's resultant automatic re-adjustment of human institutions into harmony therewith. For every war and revolution of history has been due merely to this sociodynamic lag. The continuous crime against society which is chargeable against conservatism is that it has always stood for the increase in this lag, until explosion blew it where it ought to have gone spontaneously, and that it stood there in the name of private profits.

Modern Christianity.—The Christianity of the first century called upon man to purify his relationships merely with his immediate, visible neighbors. It taught him that he must not judge, nor blame, nor try to reform, those visibly about one; but rather to love, respect and trust neighbor and self alike, in the form in which God made them. It taught us to do this in spite of the fact that *neither God, neighbor nor self often does what we think he ought to do.*

But the Christianity of the twentieth century, facing vast populations undreamed in the days of Pilate, calls upon man to go beyond this program and to purify also his formal relationships with myriads of distant, unseen, unknown, inaccessible neighbors—yet neighbors now in fact, whose daily happiness he now affects by his every act and thought, through the agency of marvelous facilities for communication and transportation, intricate networks of trade, and international systems of finance. These relationships are sometimes embodied in legal statutes and written constitutions; but just now those which affect us most are embodied in the unwritten traditions of economic custom—in our faith in selfishness as the only reliable motive in business, and in the sacred privilege of every man to buy anything in sight which he thinks someone else is going to need.

This modern Christianity, even when confined to the ethical and moral side of the question as to these economic traditions, teaches us not to judge other classes of society than our own—not to blame them for evils for which they seem to be responsible, for acts which seem to us reprehensible—for not only they, but probably we also, know not what we do. It teaches us not to hope to improve social conditions by reforming other people. It teaches us the futility of individual reform, however successful, as a means to social reform; for it, corroborated by social science, teaches that social faults are *faults of mutual relationship, and not faults of component individuals.*

Thus this modern Christianity teaches us to leave individuals as we happen to find them, as God made them—except as we may be able to make them happier, by the million, by reforming our subconscious relationships with them. It teaches us that our Cæsarian duty toward these secular relationships is to exalt them into a mutual alliance, through mutual faith, under the purest, the most co-operative and least antagonistic—and incidentally the most efficient—arrangement for carrying on the daily chores yet known to human experience. This is the factory-system.

In all social criticism let enlightened hope and faith, in both God and man, overcome in its own way—not in yours—that bitter pessimism natural to ignorance and oppression, on the one hand, and that bitter pride inevitably born of special privilege, upon the other—the two great obstacles to further social progress, soon destined to try again the souls of men as only the sharpest crises of past history have tried them. In all things, have faith in God and the rights of the Ultimate Consumer. Then keep your powder dry!

The three greatest, successful winners of revolutions in the past—Cromwell, Washington, Lincoln—were all God-fearing men, who, while they carefully kept their powder dry, prayed for divine guidance in every emergency. Not one of the three foresaw at all the extremes of policy toward which fate was forcing him. Each of them strove in vain to forefend the inevitable cataclysm through which, when it came, they guided their country as best they could.

Each of the three was bitterly assailed, before success had been attained, as a radical, as an agitator, and as the creator of those faults in society which they strove to cure peaceably. Two out of the three were outlawed, as men dangerous to society. The third was assassinated. Each, after it was all over, was canonized in public esteem.

The one figure of equal power and prominence in history, but who failed miserably in the end, Napoleon—the one man who rivaled the pretensions of the modern Kaiser in his embodiment of the heroic superman—lacked this guiding wisdom, sustaining strength, forward help and wholesome restraint—those invaluable aids derived from a belief in a God of loving spirit and scientific truth as the power which guides the universe.

APPENDIX

NOTE 1.—THE MATHEMATICAL LAW OF "CHARGING ALL THE TRAFFIC WILL BEAR"

Let K = a constant cofficient indicating the rate of social metabolism prevalent in any community; that is to say, the amount of "community-nutrition" resultant from a given amount of exertion, depending upon the population, health, topography, state of the arts, degree of liberty, etc., characteristic of that community, all of which will remain constant throughout any momentary alteration in price and consequent volume of trade.

Let C = the Natural Cost of all commodities together, in average per capita, supposing the existence of a complete factory-system.

Let Q = the quantity of Purchasing-Power (in money) developed from any given supply of commodities, through reaction through K.

Let N = the Number of Units, or other physical measure, of all commodities sold in absorbing the purchasing-power Q.

Let x = the proportion of Exeess of Selling-Price over the Natural Cost C, due to commercialism. This excess x includes all sorts of non-productive commercial costs, at every step between absolutely raw material and the finished product at the point of Ultimate Consumption. It may consist of rent, interest, dividends, net profits or other form of money transferred bodily from the producer to the commercialist, or it may consist of contributive costs which nobody gets, because they are spilled and dissipated in commercial conflict. The effect of either upon the volume of trade is the same. Both act as a retardant.

Let I = the Income of the commercial dealer, middleman, capitalist, etc., in aggregate.

The number of units sold, N, is determined by dividing the purchasing-power Q by the selling-price, $C(1+x)$. The dealer's net income I is found by multiplying the number of units sold, N, by the excess on each unit over the natural cost, or xC. Hence

$$I = NxC \quad \text{and} \quad \mathrm{N} = \frac{Q}{C(1+x)}$$

The problem is to find the value of x which gives a maximum value of I as a resultant. This problem may be solved under three different assumptions regarding the law of reaction of community-purchasing-power to community-nutrition, which is unknown. But virtually all possible variations of this law will be covered by the three following assumptions, namely, that the purchasing-power varies directly with either the nutrition itself, or with its square, or with its square root; or, in other words, that it varies inversely with either the first, the second or the one-half power of the price. Stated mathematically, these assumptions become:

$$\text{First Assumption:} \quad Q = \frac{K}{1+x}$$

$$\text{Second Assumption:} \quad Q = \frac{K}{(1+x)^2}$$

$$\text{Third Assumption:} \quad Q = \frac{K}{\sqrt{1+x}}$$

Substituting the value of N from the second equation in the first, above, and then substituting in this the three values of Q just stated, in turn, there result three equations for I in terms of K (which is a constant) and x, the varying excess of price over natural cost. Putting the first derivative of I in reference to x equal to zero, in these three cases in succession, the conditions under which the value of I, or the income of the commercialist, will become a maximum as x rises, are found to be the following, in terms of the three assumptions respectively:

Assumption	Value of x	EXCESS OF PRICE (whether in Profits or Contributive Costs) OVER NATURAL COST: Per Cent	Value of $\frac{Q}{N}$, or the proportion of Actual to Natural COMMUNITY-PURCHASING POWER	Proportion of N to $\frac{K}{C}$, or the PROPORTION OF ACTUAL TO NATURAL COMMUNITY-NUTRITION	PROPORTION of Total-Income-going-to-Commercialists to NATURAL COMMUNITY-INCOME
I	1	100	0.50	0.250	0.250
II	½	50	0.44	0.296	0.148
III	2	200	0.58	0.192	0.385

The column of this table which is of the greatest significance is the fifth. This gives the fraction of normal to which the natural life of the community has been reduced, through reduction in its aggregate rate of social nutrition relatively to its aggregate productive capacity, by the commercial practice of "charging all the traffic will bear," before the income of the person doing the charging has reached a maximum, and so has signaled to him to charge no more. The widest probable range of assumption regarding the unknown factors of social life leaves us a choice of conclusion, as to the fraction of its natural life which is left to the community by this practice, which *ranges only from about thirty per cent, if we be optimists, down to nineteen per cent if we be pessimists.*

It will of course be noted that, in reviewing the history of seventy years of American evolution, the characteristic constant of the community, K, has not remained constant. Variations in territory, population and technique have altered the freedom with which this law of charging all the traffic will bear has operated. But in this fact lies no hope for any gradual escape from its clutches; for the obvious fact is that the gradual occupation of wild lands, the gradual congestion of population, and, most of all, our marked increase in technique, with the passage of the decades, have all conspired to remove gradually the obstacles from, and to facilitate, the charging of all the traffic will bear, to the full limit signified by these figures.

The last column is of a significance only secondary to that of the fifth column; for it states arithmetically the fact that *the commercialist is guided, in his guaging of what the traffic will bear, only by his ledger. He looks only at dollar of income, not at what it will bring him.* One of the most threatening aspects of this whole problem lies in the fact that the commercialist is just as blind as is the wage-earner, or possibly more so, as to the misleading character of income in money, as contrasted with income in purchasing-power.

In other words, while the commercialist is exaggerating his income by more intense competition *he is raising prices against himself,* exactly as the wage-earner is raising prices against himself when he strikes for a higher wage. But herein lies the trouble and the danger! The wage-earner, for his part, is physically sensitive to a limit in purchasing-power, because he is at all times "up against it" as to obtaining enough commodities for bodily comfort and other personal needs. But the commercialist, on the other hand, has to attain only a moderate degree of success when he naturally begins to lose all sight of purchasing-power, because his income is already in excess of all bodily needs, and only social ambition is left as a motive for further intensity of competition. Indeed, with all the larger commercialists even this motive force has been outrun. The ledger reveals only meaningless figures, which serve as counters in a game or sport which gains in zest as it leaves behind the slightest possible risk of personal hardship.

It is this fact which constitutes the warning to the student of sociology to abandon any last hope of any gradual amelioration or reversal of the irresistible growth of commercialism upon us. For commercialism stands revealed, by the few simple figures of the last column, as one of those institutions which have arisen periodically in past human history *which lack all natural warning of undue growth. Their inherent nature is one of instability of equilibrium, because, as they proceed, their motive force grows faster than the consciousness of resistance.* They are like a cane balanced vertically upon the finger-tip, or like an avalanche starting down a mountain-side, or like a magazine of explosives upon the setting off of the first detonating-cap—*they can manifest only a cataclysmic* *rushing to a violent extreme,* before the phenomenon may become arrested in a new condition of stable equilibrium which is quite the opposite of the old.

It is not the function of this present volume, however, to trace into the future the significance of this present fact. That is to be the function of a following volume. The duty of the present one is to establish, beyond any possible question or doubt, *the train of economic events which has brought us to our present situation, and the exact nature of that present situation, viewed with unblinking eyes.*

NOTE 2.—THE ORIGIN OF BOLSHEVISM (MAY, 1919)

The new word bolshevism has arisen since this book was begun—indeed, since most of it was finished. The world's horror over the situation in Russia and Germany has raised frequent query: Whence arises bolshevism? Is it coming to America?

The mystification evident in these queries is due to our traditional insistence upon explaining all human actions in terms of individual psychologies, as manifested in group-opinions. Therefore, because we have faith in American attitudes of mind we refuse to believe that bolshevism can ever burst forth here.

But there is little, if any, foundation in history for any such an explanation of revolutions as that. Individual sentiments do not stay long enough in any one attitude to explain community-actions. In great crises public sentiment is habitually turned topsy-turvy overnight, again and again, by the automatic progress of events which pay no appreciable attention to what that sentiment may have been at any one moment. The public opinion dominant at any one time proves, upon examination, to consist far more in what the train of events has tossed into prominence and momentary power, while opposite views are condemned to obscurity, than it does of any autonomous supremacy won by the dominant doctrines, by their own inherent ability to conquer. It is only the slowly attained, permanently abiding principles, which ultimately become absorbed into our social constitution, of which the latter may be said.

Therefore the first lesson to be learned, in attempting to understand bolshevism, is that the ethical standards of a country are the result of its physical condition, rather than something autonomous with the free will of the people. Given virtually unrestricted opportunity and all but certain reward, as in America until recently—given free land, boundless fertility of soil, unity of government within, security from attack across the borders, active demand for labor, lack of hampering caste or tradition, and bounteous plenty upon every hand—and there naturally results an energetic, fearless, capable, large-minded people, loving liberty, respecting the rights of others, magnanimous and careless.

Given on the other hand, as has been the case in continental Europe for a thousand years, a large number of petty governments crowded closely together, their boundaries seldom fixed by natural obstacles, but rather determined solely by the swaying arbitrament of battle, and the only form of society which can survive at all is a military dictatorship, thinly disguised in the form of feudal fief, dukedom, monarchy or empire. Individual liberty is inevitably restricted, in order to permit a social organization rigid enough to withstand the constant menace of attack from without. Special rank and hereditary privilege arise, to form society's only tortoise-shell against invasion and sack. Absolutism grows inevitably. Population expands against a limitation by caste rather than against physical obstacles. Existence becomes possible only upon narrow margins. Ethical standards then become cautious, ungenerous and arrogant above, servile below, and grasping and narrow in all levels.

Thus (recalling from the body of this book the picture of America's growth) as there has grown upon the free America of the nineteenth century this parasitical autocracy of commercialism dominating its twentieth-century life—an autocracy as hereditary, expansive and throttling as any which ever burdened Europe in the past—and as our population has simultaneously spread from shore to shore of the continent, absorbing the freedom of the soil, a gradual growth of the latter sort of ethics must have become superimposed upon the former —the ethics which we are so proud, and so erroneous to-day, in still calling "American."

From the grinding impact thus arising through congestion, free ethics are being pulverized and precipitated into degenerate principles. *If the reader will glance back at Fig. 2 (page 444) or Table 37 (page 448), displaying the degree to which commercialism is increasingly absorbing and dissipating the normal economic energy of the land, he will get therefrom an exact picture of the degree to which, under the cosmic principle of the conservation of energy, material or normal socio-economic energy is being increasingly transformed dissipatively into degraded, discontented, vindictive ethics.*

Bolshevism, as a philosophy, is the direct and inevitable product of commercialism as an institution. Wherever commercialism prevails, and to whatever degree, bolshevism is being manufactured thereby to equal degree. Because commercialism is more actively and intensively developed in America than in any other land, this country will increasingly prove to be the world's chief origin of bolshevist doctrines. They are to-day more prevalent in New York City than in Petrograd.

How then, if this be so, is it that Russia, which is one of the least commercial of the better developed countries, and Germany, which is still far behind America in this respect, are the two countries afflicted, while we remain free?

The answer is twofold. In the first place, the situation shows that *fluidity* of all economic phenomena which was so frequently emphasized in the body of this book. America is not one economic unit, and Russia another. To a large degree the two interchange economic pressure. The discontent of the Russian peasant is largely manufactured in Chicago. Every traveler returning from Russia brings additional evidence that the economic pressure in the Ural, in Silesia and in Arizona is not so far apart, except where the temporary stress of local combat disturbs the equilibrium.

The second explanation is that *in both Russia and Germany the lid is off—blown off by the explosion of political war!* Here it is still on.[1]

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[1] Note in this connection the articles concerning Russia published by Mr. H. G. Wells, in the New York *Times*, some eighteen months after the above was written. He says:

> "And this spectacle of misery and ebbing energy is, you will say, the result of Bolshevist rule. I do not believe it is. . . . Let me say here that this desolate Russia is not a system that has been attacked and destroyed by something vigorous and malignant. It is an unsound

Hence let us lay down here a few of the general laws governing the use of lids by societies, and the etiquette governing their removal. These laws cannot be properly supported here by reference to history, but the reader is recommended to take them on faith in their excellent foundation, nevertheless.

(1) *No society has ever suffered appreciably from anarchy while the lid remained on.* It is only when something else has knocked the lid off that an ebullition of anarchy is released. It is only when the governmental structure collapses from its own inherent weakness or instability, or through foreign war, leaving in its place a formless heap of debris, that anarchy enters—really as a helpful wrecker, to remove the last vestige of the older structure, before the site may be cleared and the foundations sunk to a safe depth for the erection of a new fabric of law and order.

(2) *No lid has ever been knocked off by the pressure of discontent from below.* This law concerns one of the most universal misconceptions of the past history of social crises.

The fact that it was not the peasants of 1789 who started the French Revolution, but the "Third Estate"—the conservative propertied classes, corresponding with the Wall-Street bunch in America to-day—has already been emphasized on page 796. Within five months thereafter every one of the many laws, taxes and customs which had been oppressing the peasants so grievously for so long had been repealed. The revolution, so far as it concerned the overthrow of unjust institutions was concerned, had thereby been completed. The later development of the revolution added nothing in the way of freeing the people.

At that date the hideous Reign of Terror, which alone is synonymous with the Revolution in the average educated mind, was still four years forward in the darkness of the future! The French Revolution was no more mobilized by the discontented peasantry than a boiler-explosion is produced by the man three hundred yards away who eventually gets hit by a piece of the shell.

In our American Civil War, it was not the negro-slaves

system that has worked itself out and fallen down. It was not Communism which built up these great impossible cities, but capitalism. It was not Communism that plunged this huge creaking bankrupt empire into six years of exhausting war, it was European imperialism."

who started it, by insurrection. That act, indeed, was then as commonly feared as a revolt of our east-side wage-earners is feared to-day. John Brown's fiasco was staged upon the expectation that that was the way things were going.

But not so. From the first whisper of trouble until after the war had been lost and won, the negroes never rose. On the other hand, it was the acts of the slave-owners themselves, who (had they but been enabled to see, by the possession of a science of sociology) had every motive to avoid pushing matters to an issue, which started the Civil War which forever abolished negro-slavery from American soil.

Similarly in the present Great War, it was not the French, nor the Belgians, nor the Serbians, all of whom had had reason for generations to wish the abolition of Prussian militarism, who started the war which is destined to free Europe from that peril. *It was Germany herself who took the initial step.*

So, in our present growing economic crisis, there is not the slightest danger of any degree of discontent on the part of the wage-earners, whether manifested by a general strike, or by sabotage, or by other form of anarchy or bolshevism, ever breaking forth effectively, *so long as our present commercial system remains stable.*

For our present government, be it remembered, is not one in reality formed of political constitutions and statutes, as we so fondly believe, but *one founded upon and supported by commercialism.* Therefore it is only when commercialism has collapsed *from within,* carrying down with it temporarily our political government which we have founded thereon, that the American lid will be off, and American bolshevism, of which we possess more, however securely bottled up now, than Russia has, will burst forth—temporarily overwhelming us beyond control.

(3) *Every lid falls off "of itself," through the apparently insane but actually automatic acts of those most interested in keeping it on.* Thus it was George III, quite densely ignorant of what he was doing, who provoked to revolt his loyal American colonies, converting Washington from a consistent royalist into an unconquerable rebel. It was Louis XVI, equally ignorant of what he was about, who reconvened the long disused French parliament, in 1789, which was eventually, in its ultimate form, to dethrone and execute him. It was the South, in America

in 1861, which, believing that the North would not fight, fired the first shot—on Fort Sumter—and even at that, we are told, the act was unauthorized by the Confederate government. In times like that the greatest of men become puppets in the play of gigantic, uncontrollable social forces.

It was William Hohenzollern who voluntarily invaded Belgium, thereby crystallizing into unity the entire civilized world against him—the very result which he least intended to bring about. And it was President Wilson, who up to December, 1916, had acted as if there were no chance of America's entering the war, who landed two million men in France, defeated the German armies and led the nations in the formation of a world-government—an act totally remote from his consciousness but two short years before.

So, in regard to our present growing economic crisis, if the lid ever falls from American commercialism, to the precipitation of a world-revolution, *it will be the commercialists, and not the masses, who push it off.* At present these commercialists are doing everything in their power to push the lid toward the edge. If prices continue to rise revolution is inevitable; and if the commercialists do not control prices, no one does.

All of their acts, it is true, are as subconscious of the inevitable result as were any of those just quoted from history; but they are none the less effective for all that. The commercial lid is sure to go, and in the near future.

(4) The final conclusion from all these considerations, bearing upon the guidance of a nation previously to the occurrence of explosion, is that *it is not bolshevism nor anarchy which is to be feared, or guarded against. It is explosions which knock off social lids.*

Any nation which once allows an autocracy of undeserved special privilege to find lodgment within its system may expect to see that autocracy grow and grow, without regard to growing protests against its inequities, until it explodes from internal stress. And any country which thus allows an autocracy to explode upon its hands will find some portion of its lid blown off thereby.

Any country which thus allows its lid to be blown off, by accumulation of neglected inequity, may be sure of finding, regardless of its degree of intelligence or previous traditions of respect for law, an ample stock of bolshevism ready to burst forth through the social fissures thus created. But every nation which jealously and successfully guards itself against inoculation by the germs of special privilege, taking antiseptic measures before they have had a chance to gather power, will never suffer from anarchy in its lower levels of society.

INDEX

Abolition of Property. *See* Property, 52
Absorption of Huge Fortunes, 753
— of Securities, 262
Academy of Political Science, 808
Accelerated Growth of Commercialism. *See* Commercialism, Growth
Accident-Insurance, 115
Accumulation of Wealth. *See* Wealth
Activities vs. Individuals, 128, 142, 152, 188, 745
Administration of Property, 345
Adversity and Life, 250
Advertising, 161, 235, 344, 347, 350, 354, 498, 500, 502, 504, 506, 782, 785, 789, 791
Aesthetics. *See* Art, Ethics, Economics and Ethics, and Charging All the Traffic will Bear
Agricultural Implements, 24, 375, 516
Agriculture, 3, 359, 361, 370, 392, 412, 432, 448, 545
Air-Brake, Economic, 480
Aldrich Report on Prices, 526
Aluminum, 385
America, Colonial, 6
— in 1815, 3, 8
— in 1850, 398
American Academy of Political Science, 808
— Civic Consciousness, 703, 714
— Civil War, 704, 751, 777
— Economic Evolution. *See* Evolution, 148, 188
— History, Chapter I, 148, 188, 703, 751
American Socialism, 732, 737
— Sociological Society, 805
Analysis, Economic, 372, 442, 481
Anarchy, 144, 148, 326, 380, 424, 427, 436, 439, 473, 483, 510, 613, 619, 639, 669, 677, 682, 728, 819, 821, 846
Annalist, The, 667, 669, 670
Antagonism, Economic, 166, 168
Appliances. *See* Unemployment. Inanimate, 130, 196, 465
—, Multiplication of. *See* Expansion
Aristocracy, 592
Art under Commercialism. *See* Ethics, Economics and Ethics, 416, 422, 425, 498
Arts, Crafts and Sciences, 404, 432
AUTHORITIES: 225, 268, 275
  Aldrich Report on Prices, 526
  Am. Academy of Political Science, 808
  Am. Sociological Society, 805
  Annalist, The, 667, 669, 670
  Assoc. for Improving the Condition of the Poor, 380
  Black, Hon. F. S., 382
  Blauvelt, Comptroller Illinois Central R. R., 269
  Bogart, 3, 4, 19, 23, 47
  Boublikoff, Alexander, 744
  Bowley on Wages, 443
  Bradstreet, 511, 526, 658, 663, 667
  Brooks, Franklin, 709
  Callender, Prof., 643
  Cannon, James J., 121
  Carey, Henry C., 19

AUTHORITIES (*continued*)
  Carnegie, Andrew, 107
  Case, J. Herbert, 120
  Census, U. S., 357, 387, 443, 451, 495, 623
  Clarke, Prof., 542
  Collier's Weekly, 369
  Commercial and Financial Chronicle, 666
  Condorcet, 1, 697
  Dewey, Prof., 443, 542
  Evelyn, Sir George, 539
  Federal Bureau of Labor Statistics, 628
  Fisher, Prof. Irving, 284, 298, 301, 303, 306, 461, 526, 535, 542
  Food Commission, New York State, 513
  Gardner, Vice-Pres. Chicago & Northwestern Ry., 273
  Geographical Review, 684
  George, Henry, 202
  Gilchrist, Charles A., 692
  Goodnow, Prof., 542
  Griffith, James B., 122
  Hayes, Prof., 217, 805
  Hepburn, A. B., 88
  Herald, New York, 92, 500, 683, 687
  Hill, James J., 103, 322, 549
  Howard, Prof., 88
  Howe, Robert, 80, 83
  Illinois Central R. R., 225, 268
  Ingle, William, 76, 86
  Interstate Commerce Commission, 225, 268, 309, 447, 448, 451, 463
  Journal of Commerce, New York, 107, 464
  Journal of the Statistical Society, 443
  Juglar, Clement, 657
  Kennedy, Prof., 542
  Kuczynski, Dr., on Wages, 443
  Lane, Secretary, 718
  Laughlin, Prof., 539, 542
  Layton on Prices, 526
  Literary Digest, 107
  Mail, New York Evening, 505

AUTHORITIES (*continued*)
  Mellen, Charles S., 313, 442
  Metropolitan Life Ins. Co., 628
  Morgan, The late J. P., 314
  Mulhall on Prices, 525, 552
  Nearing, Scott, 692
  Neuhaus on Wages, 443
  North American Review, 102
  Outlook, The, 105
  Paish, Sir George, 96
  Park, Vice-Pres. Illinois Central R. R., 268, 309
  Patten, Prof., 542
  Planck, Prof., 643
  Poincaré, Prof., 643
  Public Ledger, Philadelphia, 316
  Pujo Committee, 91
  Quarterly Journal of Economics, 657
  Railway-Age Gazette, 313, 442, 443, 663
  Rice, George S., 683
  Ripley, late Pres. Santa Fé Ry., 275, 309, 324
  Robitzek, Justice, 243
  Rooney, J. J., 543
  Roosevelt, Theodore, 704
  Rubinow, Dr. I. M., 114
  Ryan, John D., 670
  Sage, Russell, 103
  Schwab, Charles M., 103
  Scientific Monthly, 692
  Seligman, Prof., 542
  Shonts, Theodore P., 683
  Soddy, Prof., 643
  Sombart, Werner, 361
  Spahr, Dr. C. B., 447, 692
  Stevens, Albert C., 657
  Sun, New York, 494, 500
  Taussig, Prof., 542, 549
  Thurber, F. B., 103
  Thurston, Prof. R. H., 9
  Times, New York. *See Times*
  Tribune, New York, 340, 500
  Veblen, Prof., 518
  Wall Street Journal, 667
  Watkins on Wealth, 459
  Webster on Textile Costs, 23
  Wildman, Prof. J. R., 101
  Wood on Wages, 443

Author's Estimates, 404, 432, 473
— Point of View, 711, 733
Autocracy vs. Democracy. *See* Economic, 352, 493, 617, 828
Automatic Social Involuntariness. *See* Social Subconsciousness
Automobiles, 19, 428, 518, 690
Averages, Misleading, 366

Back to the Land, 370, 412, 448
Ballot vs. Economic Forces. *See* Economics and Politics, Functions
Bank-Capital, 111, 123
— Clearings, 111, 123, 662
— Deposits, 111, 465
— Dividends, 111
— Failures, 661
— Loans, 111, 465
— Profits, 111
— Surplus, 111, 465
Banks and Banking, 76, 112, 300, 345, 653, 655
—, History of, 80, 112, 465
Basic Economic Contrast, 44, 51, 53, 62, 99, 117, 127, 129, 147, 156, 160, 167, 171, 184, 390, 404, 409, 419, 453, 456, 467, 469, 474, 519, 547, 588, 606, 612, 618, 653, 712, 743
— Law of Unemployment, 599, 633
Beans, 374, 478
Beef, 376
Bellamy, Edward, 711
Betterments. *See* Expansion, 271
Birthright, Our Economic, 729, 730
Bitterness. *See* Discontent, Social Philosophy
Black, Hon. F. S., 382
Blauvelt, Mr., Comptroller Illinois Central R. R., 269
Blood, Circulation of, 31
—, Social Life-, 714
Blunder of 1840, 33, 297
Board of Trade, 144, 346
Body-Economic, 467, 579
Bogart, 3, 4, 19, 23, 47
Boiler-Plate Newspapers, 497
Bolshevism, 622, 639, 670, 710, 744, 756, 843
Bonds, 109, 123, 254
Borrower, 197
Boublikoff, Alexander, 744
Bowley on Wages, 443
Boycott, 346
Bradstreet, 511, 526, 658, 663, 667
Brake, Commercialism a, upon Progress, 292, 480
Bribery, 492
Brooks, Franklin, 709
Buchanan, President, 704, 719
Building-Association, 112
Business, 226, 234, 705, 766
Businessmen as Authorities upon Economics. *See* Authorities
Businessmen's Inconsistency, 53, 69, 129, 136, 144, 150, 155, 156, 169, 175, 187, 284, 349, 439, 731, 783
— Responsibility, 383
Butler, Pres. Nicholas Murray, 802
Butter and Cheese, 374, 478
Buying, 344, 406, 513

Canals, 6, 11, 14, 465
Cannon, James, J., 121
Capital. *See* Capitalism, Credit, Valuation, 111, 123, 213, 507, 516
— and Labor, 53, 471, 507, 591, 598, 602, 605, 612, 614, 672, 737, 739, 749
Capitalism, 111, 123, 213, 259, 293, 310, 776
—, Origin of, 259, 265, 280, 293, 305
—, Passive and Active, 281
—, Small, 333
Capitalist, 53, 129, 144
Capitalist's Views upon Capitalism. *See* Authorities
Capitalization, 90, 273, 317, 516
— and Cost of Replacement, 106, 225, 258, 265, 516
Carey, Henry C., 19
Carnegie Steel Co., 107
Case, J. Herbert, 120
Caste in Industry, 132, 134, 146, 592
Cataclysm. *See* Crises, Revolution

Catalytic, 71, 125, 570, 642
Cattle, 375
Causes, Social. *See* Social Subconsciousness
Cement, 385, 484, 716
Censor, Economic, 782, 789
Census, U. S., 357, 387, 443, 451, 495, 621, 697
—, Massachusetts, 443
Centralization vs. Decentralization, 113, 147, 150, 427, 507, 509, 511, 513, 516
Chamber of Commerce, 144, 346
Charity, 338, 340, 391
Cheap Standards of Commercialism. *See* Economics and Ethics
Cheese and Butter, 374, 478
Chicago & Northwestern Ry., 273
Christianity, 830, 833
Circulation, Economic, 599, 619
—, Monetary, 114
— of the Blood, 31
Circulating Medium, 72, 76, 81, 85, 87, 97, 110, 330, 569, 571, 621, 651, 655, 669, 714
— — based upon General Wealth rather than Gold, 98, 120, 702
Cities, 362, 365, 412, 639, 683, 771
Civic Consciousness, Evolution of American, 703, 714
Civil War, American, 704, 751, 777
Civilization, 30, 125, 295, 353, 412, 688, 830
—, Latent, 183, 330, 410, 477, 556, 637
—, Our Patent-Medicine, 295
—, Treason to. *See* Treason
Clarke, Prof., 542
Class-Action, 679, 755
— Dominance, 590, 673
— Struggle, 737, 739, 749
Classification of Credit-Forms, 84
— of Occupations, 390
Clearing-House, New York, 662
Clothing. *See* Textile, Fashions, 392, 414, 432
Coal, 329, 385, 478
Collapse, 263, 653, 669, 695, 714, 750, 752, 777, 845, 847
College, Liberty in the, 782
Collier's Weekly, 369
Colonial Industry, 3, 5
Colson, Clement, 443
Commercial Anarchy. *See* Anarchy
— *and Financial Chronicle*, 666
— Authorities. *See* Authorities
— Combat, 396, 432
— Credit, 67, 71, 99, 111, 213, 314, 331
— Duplication, 49, 53, 140
— Efficiency, 274
— Failures, 659, 661, 669
— Inefficiency, 118, 129, 274, 408, 662
— Initiative, 135, 207, 208, 211, 265, 324, 779
— Militarism, 176, 191, 355, 358, 373, 390, 416, 429, 434, 474, 523, 555, 567, 701, 708
— Munitions, 390, 396
— Non-Combatants, 434, 479
— Occupations, 164, 188, 391, 396, 406
— Oligarchy, 355
— Propaganda, 209, 230, 267, 790, 822
— Property, Volume of, 461
— Risk, 209, 256, 282, 460, 462
— Stipends, 442, 453
— Tourney, 174
— Waste of Transportation, 346, 410, 426
— Wastes which Escape Enumeration. *See* Omitted Losses
Commercialism, 62, 127, 149, 159, 164, 188, 191, 195, 233, 310, 350, 387, 391, 396, 402, 406, 411, 420, 424, 432, 458, 474, 513, 534, 600, 701, 705, 744, 767, 784, 789, 792, 825
—, Aggregate, 432, 458, 474
— and Art, 422, 425
— a Brake upon Progress, 292, 480
—, Contributory, 166
—, Cumulative Nature of. *See* Commercialism, Growth of

Commercialism, Definition of, 127, 164, 166, 188, *826*
— vs. Democracy, 566, 591, 614, 669, 677, 679, 695, 700, 707, 712, 714, 718, 721, 727, 778, 789, 814
— Dominates Production, 272, 350, 403
—, Economic Turbulence due to, 380, 424, 548, 636, 660
— in Embryo, 129, 167
—, Expansion of. *See* Commercialism, Growth of
—, Goal of, 238
—, Growth of, 149, 264, 391, 402, 437, 474, 520, 523, 569, 748
—, Indicators of, 521
— and Journalism, 354, 370, 491, 503, 782, 784, 788
— vs. Life, 165, 177, 247, 251, 338, 423, 472, 492, 615, 617, 682, 831
— vs. Loyalty, 711
—, Normal, 319
— and Peace, 189, 564
— and Public Ownership, 698
—, Standards of, 244, 247, 339, 415, 420, 422, 424, 491
— and Surplus, 261
— and Technical Progress, 149, 387, 403, 435, 487, 520, 566
— and Trade, 233, 350
— and Unemployment, 584, 600, 636
— and War. *See* War
— vs. Production. *See* Basic Economic Contrast, 404, 456, 469, 474
— vs. Socialism, 297
— vs. Wilderness, 292
Commune, French, 79, 558, 650
Communication, 3, 6, 8, 20, 22, 28, 159, 363, 394, 432, 484, 489, 521
Community-Nutrition. *See* Food, Life-Support, 238, 470
—, One-Hundred-per-Cent, 587
— -Energy. *See* Social Energetics, Credit, Life-Support
Competitive Wage-System, 596, 602
Competition, 49, 53, 148, 176, 234, 325, 406, 743, 770, 772
—, Cost of. *See* Cost
— the Death of Trade, 241, 670
— and Economic Evolution, 235, 325
Condorcet, 1, 697
Confederate States of America, 79
Confiscation of Property, 52, 109, 679, 702, 729, 766, 772
Conflict, Inevitable. *See* Revolution
Confusion Profitable under Commercialism, 424
Congestion, 168, 362, 412, 428, 639, 683
— and Transit-Facilities, 684, 687, 689, 771
Conservation, 25, 157, 329, 382, 670, 786
Conservatism, 430, 835
Consolidation, 29, 147, 516
Consumer. *See* Ultimate
Consumeration, 723, 760
Consumerism, 723, 731, 740, 760
—, Incomes under, 767
— vs. Socialism, 740
Consumption. *See* Purchasing Power, Production, Ultimate
Contributory Commercialism, 166, 744
Control, Social. *See* Social Control, Social Subconsciousness
Co-operation, 72, 153, 731
Co-ordination, 64
Copper, 385, 478
Corn, 374, 478
Corruption, 212, 763, 765
Cost, Natural, 137, 184, 277, 793
— of Commercial Competition, 163, 168, 176, 198, 279, 458, 469, 474, 513, 770, 784
— — Living. *See* Price, 524
— — Replacement, 106, 225, 258, 265, 516
Cottage-System of Industry, 45, 127
Cotton, 8, 10, 374, 478

252

Cowardice, Intellectual, 2, 169, 695, 757, 778, 793, 805, 806, 809
Craft, Love of. *See also* Arts, Crafts and Sciences, 171, 633
Credit, 49, 65, 71, 80, 86, 99, 100, 111, 213, 289, 314, 331, 587, 648, 702, 752, 757
—, Expansion of, 90, 213, 569
—, Factory-System, 49, 65, 67, 99, 213, 289, 587, 752
—, History of, 80, 100, 111
—, Ideal, 125
—, Non-Transferability of, 745, 757
— and Patriotism, 554
— and Repudiation, 79
—, Transformative Power of, 78, 558, 650
— and Unemployment, 619
— -Instruments, 73, 84, 125, 331, 569
Crime, 244, 604
Crises, 435, 648, 653, 678, 690, 696, 715, 750, 796
Criterions, Economic, 41, 43, 66
Cumulative Economics. *See* Commercialism, Growth of, 261, 651, 653
Currency. *See* Circulating Medium, 655
—, Depreciation of, 195, 457, 470

Day, Mr., Founder of the New York *Sun*, 494
Dead Horses, Dividends on, 316
Deadly Parallel between Production and Commercialism, 129
Debs, Eugene V., 313
Debt, Public, 111, 465
Decentralization vs. Centralization, 113, 147, 150, 427, 507, 509, 511, 513, 516
Deficit in Employment. *See* Unemployment
Degradation, Social, 165, 177, 251, 338, 423, 472, 492, 615, 617, 618, 682, 818, 831
Delusions, Economic, 55, 230, 471, 589, 591, 600, 619, 679, 791
Demand. *See* Consumption, 161, 169, 193, 233, 373, 377, 418, 499, 545, 584, 594
— for High Prices, 419
—, Supply and, in Labor, 633
Democracy, 265, 352, 718, 725, 767, 778, 789
—, Economic. *See* Economic
Demoralization. *See* Degradation
Density of Population. *See* Congestion, 358, 543
Depreciation of Capital, 223, 307
— of the Currency, 195, 457, 470
Derelicts, Social. *See* Degradation, 338, 831
Despotism, Economic. *See* Social Control, Social Subconsciousness, 134, 244, 420, 423, 536, 549, 565, 590, 615, 675, 718, 742, 777, 783, 818, 824
Determinism. *See* Economic, Social Subconsciousness
Dewey, Professor, 443, 542
Dilution of Purchasing-Power, 195, 457, 469
Diluits, 195, 469, 744
Direction of Modern Tendencies. *See* Evolution, 146, 150, 171, 358, 374, 434, 439
Discontent. *See* Social Philosophies, 155, 181, 377, 597, 599, 614, 678, 681
Discounts, 114
Diseases of Nations, 1, 470, 580, 588
Disparity in Income, 336, 355, 378, 549, 591, 596, 690, 692
— in Unemployment, 595
Display, 230, 414, 504, 518
Dissipation, Moral vs. Economic, 56, 63, 425
— of Economic Energy, 63, 157, 425
Distribution of Urban Population. *See* Congestion, 364
Dividends. *See* Watered Stock, 91, 94, 101, 106, 196, 204, 259
— on Dead Horses, 316
Diversity, 30
Divertive Occupations, 398, 432

Dogmatism, Social, 759, 832
Domestic Labor, 360, 394
— — and Unemployment, 632
Domination, Economic, 272, 403, 591
Drift in Occupations. *See* Migration
Duality in Modern Progress. *See* Basic Economic Contrast, 127, 147, 171, 712
Dubuque & Sioux City R.R., 270
Duplication, 49, 53, 140, 409, 784

Earnings. *See* Expansion, 90, 101, 108
Economic Aim, 38
— Air-Brake, 480
— Analysis, 372, 442, 481
— Anarchy. *See* Anarchy
— Aristocracy, 592
— Autocracy. *See* Oligarchy, 352, 493, 728
—, The Body-, 467, 579
— Cancer. *See* Deadly Parallel, 712
— Catalysis, 71, 125, 570, 642
— Causes. *See* Economic Sources, Social Subconsciousness
— Censor, 782, 789
— Circulation. *See* Circulating Medium, Economic Fluidity, 31, 599
— Citizen, Birthright of the. *See* Ultimate Consumer, 729, 730
— Community, Perfect, 586
— Competence, 589
— Consciousness. *See* Social Subconsciousness, 714
— Contrast, The Basic. *See* Basic
— Control. *See* Social Control, 383, 410, 713
— Crises. *See* Crises
— Criterions, 41, 43, 66
— Degradation. *See* Social Degradation, 177
— Delusions, 55, 230, 471, 589, 591, 600, 619, 679, 791
— Democracy, 265, 352, 718, 726, 729, 731, 739, 749, 754, 777, 783, 818, 824
Economic Democracy and Socialism. *See* Consumerism, Socialism
— Despotism. *See* Social Control, 134, 244, 420, 423, 536, 549, 565, 615, 675, 718, 742
— Determinism, 57, 59, 383, 528, 536, 550, 595
— Detonator, 669, 777, 779
— Dissipation, 56, 63, 157, 390, 425
— Dogmatism, 759
— Domination, 272, 403, 591
— Duplication, 49, 53, 140
— Education, 351, 370, 776, 778, 804, 820, 827
— Efficiency, 178, 185, 274, 310, 383, 408, 467, 472, 475, 586
— Energy, 188, 479, 642
— —, Distribution of, 443, 450
— —, Transfusion of, 339
— Equilibrium, 231, 238, 243, 276, 281, 383, 423, 498, 556, 574, 598, 632, 658, 666, 842
— Equity. *See* Economic Citizen, 766
— Equivalence, 137, 588
— Evolution. *See* Relative Growths, Evolution
— Expansion. *See* Expansion
— Fluidity, 248, 364, 615, 634, 770
— Forces. *See* Social Subconsciousness, 56, 100, 152, 205, 218, 236, 521, 529, 678
— Functions. *See* Economics and Politics, 151, 242, 712
— Gravitation, 142, 360, 369, 386
— History. *See* Evolution, 111, 188, 235, 475
— Hypnosis, 230
— Ideals, 586, 726, 731, 753, 760
— Independence, 588
— Inertia, 202, 633
— Issue. *See* Question, 251
— *Journal, The,* 443
— Lag, 488, 533
— Liberty, 154, 252, 493, 584, 641, 789, 824
— Migration, 360, 368, 373, 386, 544, 566, 634, 712

Economic Motive Forces. *See* Social Sub-consciousness, 56, 152, 234, 236
— Oligarchy, 355, 591, 705, 711, 718, 817
— Opportunity. *See* Civilization, Latent, 477, 587, 590, 595, 612
— Organization. *See* Factory-System, 178, 185, 383, 408, 467, 472, 475, 729, 775, 779
— Orthodoxy. *See* Sociology, Professional, 42, 470
— Paradoxes, 605, 612, 614, 632, 637, 638, 682
— Parasite. *See* Commercialism, 143, 156, 240, 470, 571, 618
— Patriotism. *See* Treason, 297, 556, 722
— Perfection, 42, 178, 185, 200, 307, 586, 726, 731, 753, 760
— Poll, 187, 390
— Possibilities, 183, 330, 410, 477, 556, 637
— Power. *See* Ultimate Consumer, 78, 165, 188, 194, 558, 650
— Preparedness. *See* Education, Reform, 729
— Problem, The. *See* Question, 38
— and Political Functions Distinct. *See* Economics and Politics
— Reform. *See* Reform
— Responsibility. *See* Treason, 482, 697, 737, 738, 744, 746
— Robbery. *See* Surplus, 792
— Series and Parallel, 513
— Shrewdness, 730
— Slavery. *See* Social Subconsciousness, 242
— Sources, 165, 188, 194, 197, 280, 339, 348, 471, 492, 521, 529, 555, 579, 729
— Sovereignty, 39, 41, 165, 194, 237, 241, 280, 591, 593, 712, 726, 729, 740, 753, 824
— Superstitions, 146, 208, 235, 354, 356, 463
Economic Tradition: *See* Economic Superstitions
— Transformation, 78, 558, 650
— Tribute. *See* Interest, Theory of, 93, 100, 137, 196, 303
— Turbulence due to Commercialism, 380, 424, 548, 636, 660
Economics, Cumulative. *See* Commercialism, Growth of, 261, 651, 653
— and Death-Rate, 294
— and Electricity, 644
—, Equity in, 692
— and Ethics, 88, 168, 176, 192, 241, 244, 247, 294, 313, 329, 333, 339, 342, 350, 400, 406, 414, 415, 420, 422, 424, 436, 439, 470, 483, 491, 506, 541, 584, 591, 599, 604, 618, 622, 637, 639, 709, 723, 747, 768, 783, 834, 845
—, Ideal, 587, 726, 731, 753, 760
— and Legislation. *See* Economics and Politics, 641, 679, 682, 691, 833
— and Morals, 56, 100, 152, 236, 425, 471, 604
—, Obsolete, 46, 51, 81, 561
—, Orthodox. *See* Sociology, 230, 470
— and Politics, 37, 151, 195, 242, 493, 577, 641, 671, 712, 714, 749, 765, 833
— and Psychology. *See* Psychology, 167, 236, 435, 549
—, Submarine, 294
— and Thermodynamics, 643, 645
Editorial. *See* Journalism, 370, 448, 510, 572, 787, 804
Education. *See* Universities, 351, 646, 776, 778, 789, 792, 804, 820, 827
Educational Function of War, 183, 650
Educator, War as an, 183, 650
Efficiency, Commercial. *See* Economic, Social, 274
—, Economic. *See* Economic
— and Economy, 25, 129, 178

Eggs, 376
Electric Light and Power, 29, 421, 505
— Railway Association, American, 773
— Traction, 29
Electricity, 644, 723
Eleemosynary Institutions, 332, 339
Elevated Railway, 29, 684
Elevator, 30
Employer, 53, 129, 144, 187, 533, 583, 598, 612, 678, 681, 746
Employer's Religion. *See* Businessmen, Capital, 53, 144
Employment. *See* Unemployment, 579, 586, 593
—, Basic Law of, 599
— Bureaus, 601
Emulation. *See* Competition, 176, 641, 694, 743
Energetics, Social, 157, 239, 373, 438, 556, 618, 632, 638, 642, 717, 812, 832
—, Basic Contrast in Physical, 157
Energy, Economic. *See* Social Energetics, 44, 188
English Tallies, 81
Entropits, 197, 343, 373, 569, 744
Equality, 320, 590
Equilibrium, Economic. *See* Economic
Equities, 138, 279, 293, 320
Equivalents, Economic, 137, 588
Ethics. *See* Social Philosophy, Cowardice, Economics, Patriotism, 831
— and Evolution. *See* Evolution
Evelyn, Sir George, 539
Evening Mail, New York, 505
Evolution. *See* Relative Growths, Social Evolution
—, Competition and Economic, 235, 325
—, Economic, 45, 48, 91, 111, 124, 148, 171, 183, 188, 235, 325, 358, 374, 432, 450, 472, 478, 512, 520, 523, 532, 540, 546, 560, 678, 682, 723
— vs. Edict, 832
—, Ethics and Social, 520, 723
Evolution, Political, 29
—, Social vs. Industrial, 183
Expansion, 90, 101, 108, 206, 208, 211, 254, 289, 310, 314, 317, 318, 474, 651, 706
—, Acceleration of, 264
—, Factory-System, 211
—, History of, 100
— of Population, 48
Exports and Imports, 15, 123
Extension of Facilities. *See* Expansion

Face-Value. *See* Securities, 104, 256
Factory-System, 46, 49, 54, 61, 69, 127, 151, 154, 206, 211, 289, 412, 475, 587, 835
— — Credit. *See* Credit
— —, Ideally Complete, 586, 726, 731, 753, 760
— —, Incomes under the, 767
— —, A Metropolis under the, 412, 762
— — permeated with Ownership-in-Industry, 129, 774
Failures, Bank-, 661
—, Commercial, 659, 669
Famine. *See* Life-Support, Parasite, 177, 358, 374, 434, 615
Farm-Area, 375
— Credits, 121, 123, 375
— Implements, 24, 375
— Products, 123
— Valuation, 375
Fashion, 414, 548
Federal Bureau of Labor Statistics, 628
— Reserve Bank, 655
Finance. *See* Circulating Medium, Money, 88, 111, 254, 345
—, History of American, 111
Fire-Insurance, 115
Fisher, Edmund D., 87
—, Professor Irving, 284, 298, 301, 303, 306, 461, 526, 535, 542
Flint, Charles R., 103, 106
Flotsam, Social, 338, 831
Fluidity, Social, 248, 364, 615, 634

Food Commission, New York State, 513
— or Famine. *See* Life-Support, 358, 372, 374, 380, 434, 478, 615
— Supply. *See* Produce, Life-Support, 392, 432
Force versus Credit, 757
Foresight and Commercialism, 295
Forum, 787, 799, 802
Free Speech, 493, 780
— Will, Social. *See* Social Subconsciousness
French Revolution, 736, 755, 756, 777, 796, 846
Fruit, 376
Functions, Economic vs. Political. *See* Economics and Politics, 151, 242
Future Progress, 412, 767, 775

Gardner, Mr., Vice-pres. Chicago & Northwestern R.R., 273
Gas-Power, 25
Gas-Works, Philadelphia, 763
George, Henry, 202
Geographical Review, 684
Gilchrist, Charles A., 692
Gilman, Charlotte Perkins, 250
Gold, 72, 77, 385, 455, 478, 537, 656, 706
Goodnow, Professor, 542
Gradual Reform, 769, 772, 804, 825
Graft, 212, 763
Gravitation, Social. *See* Social Degradation, 142, 251, 369, 632
Griffith, James B., 122
Growth, Social. *See* Evolution, Relative Growths

Harvester-Trust, 516
Hay, 374, 478
Hayes, Professor, 217, 805
Hepburn, A. B., 88
High Cost of Living. *See* Price
Hill, James J., 103, 322, 549
Hillquit, Morris, 313, 734, 742, 760
Hiring-Power, Social. *See* Unemployment, 586, 590, 593, 612
Horses, 375
Howard, Professor, 88
Howe, Robert, 80, 83
Human Nature and Reform. *See* Reform, 169, 182 247,
— — and Unemployment, 583, 611, 632
Hypnosis, Economic, 230

Ideal Economics. *See* Economic Perfection, 587, 726, 731, 753, 760
Idleness. *See* Unemployment
Illinois Central R.R., 225, 268
Illiteracy and Unemployment, 632
Illumination, 29, 421, 505
Immorality, 56, 63, 244, 425, 604, 609, 639
Imports and Exports, 15, 123
Income and Outgo of Interest, 220, 335
— — of Prices, 237
— — of Rent, 201
Incomes, 217, 691, 767
Income-Tax, 641, 691, 695
Income, Unearned. *See* Commercialism, 753
— and Valuation, 68, 100, 105, 214, 224, 243, 258, 302, 750, 776
Incompetence, 582, 611, 632
Individual Forces, Social vs., 406, 814, 834
— vs. Social Responsibility. *See* Responsibility, 471
Individuals, Activities vs., 128, 142, 152, 188, 745
Industrial vs. Social Evolution. *See* Evolution, 183
Industrial Securities. *See* Circulating Medium, Securities, 255, 317, 461
Industry in the 18th Century, 5
— Paralysed by Caste, 132, 134, 146, 592
—, Women in, 386
Inefficiency, Commercial. *See* Commercialism, 118, 129, 274, 310, 408
Inertia, Economic, 202, 633
Inevitable Conflict. *See* Revolution, 617
Ingle, William, 76, 86

Initiative, Commercial, 135, 207, 208, 211, 213, 215, 223, 228, 265, 324, 779
—, Factory-System, 176, 211
Insane Economics. *See* Economic Delusions, 38, 419, 589, 730
Instability, Social. *See* Revolution, 74, 98, 173, 263, 585, 622, 640, 653, 669, 677, 694, 708, 752
Insurance, 88, 114, 117, 123
Intellectual Cowardice, 2, 169, 695, 757, 778, 793, 805, 806, 809
— Laziness, 581, 640, 796
— Patriotism. *See* Treason, 639
Interborough Rapid Transit Company, 688
— — — Commission, 684
Interchange, 50, 63, 154, 587, 593, 702
— and Credit, 72
Intercollegiate Socialist Society, 733, 736, 745, 759
Interest, 67, 93, 100, 196, 204, 215, 254, 284, 298, 301, 332, 458
— Bearing Securities. *See* Securities
— Burden, Aggregate, 463
— not a Source of Value, 222
—, Origin of, 217
— Rate, 93, 306, 460, 463
—, Who Pays, 286, 459
INTEREST-THEORIES:
  General, 215
  Professor Fisher's, 284, 298, 320
  Summary of, 320
  Tributary, 303
  Use or Productivity, 301, 304
Interest, Zero Rate of, 306
Interstate Commerce Commission, 225, 268, 309, 447, 448, 451, 463
Invention as a Social Cause. *See* Patents, 5, 11, 23, 28, 30, 32, 35, 147, 485, 560, 566
— and Securities, 486
Investment, 106, 108, 114, 208, 213, 215, 223, 228, 258, 262, 265, 276, 462
—, Opportunities for, 209, 213, 215, 223, 228, 268, 273, 276, 324, 462
Invisible Government. *See* Social Subconsciousness, 435, 698, 707
Involuntary Social Action. *See* Social Subconsciousness
Iron, 385, 478

Jackson, Andrew, 704
Jewishness, 656, 767
Jobs, 593
Journal of Commerce, New York, 107, 464
Journal of the Statistical Society, 443
Journalism, 354, 370, 490, 503, 782, 784, 788
—, Boiler-Plate, 497
—, History of, 494
— and Transit-Facilities, 352, 788
Juglar, Clement, 657

Kansas City Union Depot, 279
Kennedy, Professor, 542
Kuczynski, Dr., on Wages, 443

Labor and Capital, 53, 471, 507, 591, 598, 602, 605, 612, 614, 628, 641, 672, 679, 737, 739, 749
—-saving Machines, 640
—, Surplus, 632, 634, 640
Lag, Social, 23, 149, 488, 703, 835
Laissez Faire, 252
Lake-Navigation, 13
Land, 192, 196, 199, 202, 370, 412, 448
Lane, Secretary, 718
Latent Civilization, 183, 330, 410, 412, 477, 556, 637
Laundry, 413
Laughlin, Professor, 539, 542
Law, Sherman Anti-Trust, 94, 317, 452, 510, 515, 670, 707
Law of Unemployment, Basic, 599, 633, 636
Layton on Prices, 526
Laziness, Intellectual, 581, 720, 796
— and Unemployment. *See* Unemployment, 581, 611
Lead, 385, 478

Legislation and Economics, 641, 679, 682, 691, 833
Lewis and Clark, 323
Liberty, 154, 252, 493, 789, 824
—, Academic, 782
—, Economic, 727, 824
Life vs. Commercialism, 165, 177, 247, 251, 338, 423, 472, 492, 615, 617, 682, 831
— Insurance, 115
Life-Support, 37, 41, 62, 142, 145, 152, 185, 192, 238, 240, 358, 371, 372, 374, 377, 380, 392, 432, 470, 478, 587, 590, 615, 701, 730
Lincoln, Abraham, 34, 705, 718, 726, 751, 755, 812
Literary Digest, 107
Literature Charged All the Traffic will Bear. *See* Art, 244, 425, 498, 501
— under Commercialism, 834
Litigation. *See* Sherman Anti-Trust Law, 345
Live Stock, 375, 465
Loan and Trust Companies, 111, 112
Loans, 83, 111, 114, 197, 207, 284
Lockouts, 346, 532, 676
Locomotives, 22, 26, 426
Logan, James, 103
Loyalty. *See* Patriotism, Treason
Lumber, 385, 478

Machinery. *See* Appliances, 130, 196, 465
Malnutrition, Social. *See* Famine, Life-Support, 238, 470, 841
Manufacture, 123, 360, 386, 446, 507, 517
—, Economic Analysis applied to a Single, 481
Marine Engine, 25, 26
— Insurance, 115
Market-System, Terse Definition of, *See* Commercialism, 166, 826
Marx, Karl, 733, 757
Mass-Action, 644
Massachusetts State Census, 443
Materials, Raw, 385, 478
Mathematical Law of Charging All the Traffic will Bear, 239, 839
Maxima of Stock-Prices, 668
— of Wages, 445
McKinley, President, 708
Meat, 376
Mechanical Occupations, 392, 432
Mellen, Charles S., 313, 442
Men's Clothing, 518
Merchant Marine, American, 14, 27
Mercantile Pursuits, 396, 432
Merchandizing, 121, 164, 325, 407, 408, 610
Messenger-Boys, 167, 435
Metabolism, Social, 31, 188, 198, 238, 340, 430, 458, 470, 570, 579, 839
Middlemen, 163, 513
Migration, 360, 368, 373, 386, 536, 544, 566, 634, 712
Militarism. *See* Commercial Militarism, War, 355, 523, 555, 566, 701, 708, 815
Milk, 381
Minima of Stock-Prices, 668
— of Wages, 445
Minimum Wage, 628, 641, 679
Monetary Standard. *See* Gold, 72
Money. *See* Circulating Medium, Finance, 94, 454, 470, 507
— in Circulation, 111
— Making, 261, 651, 666
— Trust, 91, 113
Monopoly. *See* Centralization, 49, 53, 510, 513, 516, 763
Moral vs. Economic Forces, 56, 100, 152, 236, 425, 471, 604
Morgan, J. P., 314
Mormon Economics, 288
Mules, 375
Mulhall on Prices, 525, 552
Multiplicity in Industry, 131, 140, 424
Municipal Ownership. *See* Public Ownership
Munitions of Commercial Warfare, 396, 432
Mutton, 376

National Banks, 111, 112
— Factory-System, 60, 166
— Market-System, 166
— Party, 734

National Road, 7
— Vanity, 382
Nations, Diseases of, 1, 470, 581, 588
Natural Cost, 137, 184, 277, 793
— Economics, 39, 412, 586, 588, 726, 731, 753, 760
— Insurance, 117
— Price, 184, 586
— Rent, 200
Navigation, Lake, Ocean and River, 11, 13, 14, 25, 27
Nearing, Scott, 693
Negotiation. *See* Commercialism, 62, 127, 159, 411
Negro Labor, 360, 389
— Slavery, 8, 11, 360, 389, 704, 719
Neuhaus on Wages, 443
Newspapers and Periodicals, 490, 496, 498, 782, 784, 790
Non-Combatants, Economic, 434, 479
North American Review, 102
Nullification, 704
Nutrition, Community. *See* Life-Support, 238

Oats, 374, 478
Obsolete Economics, 46, 51, 81, 561. *See* Sociology
Ocean-Navigation, 11, 14, 25, 27
Occupational Drift. *See* Migration
Occupations, 387
—, Classification of, 390
—, Commercial. *See* Commercialism, 390, 396, 404, 406
—, Productive. *See* Production, 390, 394, 404
— and Unemployment, 623, 625, 631
Oligarchy. *See* Autocracy, 355, 591, 705, 711, 718, 817
OMITTED LOSSES:
By-Products, 406, 425
Ethics, 637
Hiring Labor, 342
Illumination, Commercial, 506
OMITTED LOSSES (*continued*)
Indirect Transportation, 346, 410, 426
Insurance, 118
Interest on Commercial Paper, 121
Lack of System, 426
Miseducation, 789
Non-Combatants, 434
Politics, 765
Profits, 458
Retail Shopping, 406
Sanatariums, 429
Seeking Work, 618
Strikes and Lockouts, 346, 532, 676, 779
Surplus, 458
Transit-Advertisements, 352, 788
Transportation, Indirect, 346, 410, 426
Unemployment, 605, 609
Opportunities for Investment, 209, 213, 215, 223, 228, 265, 276, 324, 462
Opportunity. *See* Economic Opportunity
Opera under Commercialism, 417
Optimism, 616, 829
Organization, Perfect Economic, 412, 586, 726, 731, 753, 760
Organize as Ultimate Consumers, 729, 775, 779
Organized Labor. See Unions
Orthodox Economics, 42, 230, 371, 438, 470, 510, 638
— Socialism. *See* Socialism
— Sociology. *See* Sociology
Outlook, The, 105
Over-Work, 597
Ownership-in-Industry, 49, 61, 127, 130, 138, 143, 151, 167, 295, 396
Ownership vs. Possesion, 49, 51

Pacific Railway, 29
Paish, Sir George, 96
Panic of 1914, Silent, 654, 660, 663, 665, 668
Panics, History of. *See* Crises, 656

Panoply of Commercial Warfare. *See* Munitions
Parasite, The Economic. *See* Commercialism, 143, 156, 172, 240, 571, 618
Paradoxes, Social. *See* Economic, Social
Parcel Post, 700, 772
Park, Mr., Vice-Pres. Illinois Central R.R., 268, 309
Patent-Medicine Civilization, Our, 295
Pathology, Social, 1, 470, 581, 588
Patriotism, 251, 297, 556, 639, 649, 711, 722, 806, 209, 817, 819, 821, 829
— and Credit, 78, 554, 558, 650
Patten, Professor, 542
Peace and War, 167, 183, 556, 559, 561
— and Commercialism, 564
Peaches, 369
Peanuts, 376
Pease, 374, 478
Per Capita Data (The data themselves are in the Tables), 10, 357, 375
Periodicals and Newspapers, 490, 496, 498, 782, 784, 790
Petroleum, 385
Pharisaism, 800
Philosophy, Social. *See* Social
Pioneer Economics, 291, 587
Piracy, 207, 209
Political Impotence. *See* Economics and Politics, Socialism
— Corruption. *See* Corruption
Politics and Economics. *See* Economics
Poor, Assoc. for Improving the Condition of the, 380
Population, Proportionality to, 10, 357, 375
—, Density of, 358, 362, 543
—, Distribution of, 363
— and the Factory-System, 48
—, Prosperity Grows with, 544, 640
Populism, 707
Pork, 376
Post-Office, 489, 700, 771
Potatoes, 374, 381, 478
Potentialities, Social. *See* Civilization Latent, Social
Poultry, 375, 376
Poverty. *See* Disparity, Display, 169, 336, 513, 690
Power, Economic, 165, 188, 194
—, Stationary, 24
Preparedness, Economic, 729
Press, Liberty of the. *See* Journalism, 493, 782
Price. *See* Natural, 60, 184, 221, 234, 237, 258, 281, 373, 377, 380, 419, 513, 525, 528, 536, 543, 545, 550, 552, 586, 602, 678, 713, 746
— Determinants, Summary of, 550
— Index, 123, 525, 540
— of Stocks, 668
—, Tooke's Theory of, 553
Prices and Taxes, 573
Printing-press, 30, 495
Printing and Publishing, 396, 518
Privateering, 209
Production, 39, 55, 56, 58, 127, 142, 160, 372, 374, 376, 383, 385, 390, 394, 404, 507, 545, 701, 730, 733, 738, 741
— vs. Commercialism. *See* Basic Economic Contrast, 404, 456, 469, 474
— and Discontent, 379
— Dominated by Commercialism, 272, 403, 591
— Relative to Productivity, 60, 169, 241, 373, 499
Productive Population Analyzed, 392
Productivity, 4, 57, 142, 192, 383, 426, 544
Professional Occupations, 360, 394, 404, 624
— Sociology. *See* Sociology, 42, 230, 371, 438, 470, 510, 542, 550, 603
Profits. *See* Diluits, 91, 94, 101, 137, 235, 239, 458, 641, 764
Profit-Sharing, 53, 153

Progress, Future, 412, 775
Propaganda, Commercial, 209, 230, 267, 790, 822
Property, 51, 52, 109, 345, 396, 461, 465, 679, 702, 729, 766, 772, 776
Property, Confiscation vs. Abolition of. *See* Confiscation, 51
— in Industry, 49, 61, 127, 130, 138, 143, 151, 167, 295, 396
Proprietary Rewards, 295
Prosperity and Discontent, 155, 377
— Grows with Population, 544, 640
Psychology in Social Energetics, 167, 236, 435, 549, 585, 611, 632, 635, 814, 824, 831
Public Debt, 111, 465
Public Ledger, Philadelphia, 316
Public Opinion and Social Evolution. *See* Social Subconsciousness, 723, 833
— Ownership, 184, 314, 326, 698, 763, 769
Publicity, 267
Pujo Committee, 91
Purchasing-Power, 161, 169, 195, 457, 469, 470, 524, 531, 534, 590, 593, 669, 680, 682, 733
— — and Panic, 654, 669

Qualitative and Quantitative Unemployment, 605
— Sag in Supply, 423, 498, 598, 607, 614
Quantity X, 391
Quantity Y, 401
Quarterly Journal of Economics, 657
Question of the Day, The Great, 146, 824

Radicalism, 144, 252, 314
Railroads, 560
—, Condition of, 309
—, Efficiency of Operation of, 274, 310
—, History of, 17, 20
— and Receiverships, 663
Railroads, Wealth of, 465
Railroad-Rates, 19, 225, 258, 268, 275, 281
Railway-Age Gazette, 313, 442, 443, 663, 684
Railway-Terminals, 20, 279, 411
Rand School, 733, 736, 790
Rate of Interest. *See* Interest, 93, 306, 460, 463
— of Issue of Securities. *See* Securities
Rates of Social Evolution. *See* Evolution, Reform Gradual, Relative Growths, Time
Raw Materials, 385, 478
Real Estate. *See* Land, Rent, 465
Reapers, 24
Receiverships, 663
Recreation under Commercialism, 390, 393, 413, 418, 428
Reform, 170, 182, 378, 434, 700, 702, 713, *723*, 729, 746, 748, 752, 769, *775*, 779, 786, 799
—, Educational, 823
—, Gradual, 769, 772, 804, 825
— and Human Nature, 168, 170, 435, 833, 835
— and Time, 358, 431
Refunding. *See* Securities, 101, 229
Relationships vs. Components, 179, 182
Relativity, 644, 815, 836
RELATIVE GROWTHS: 111, 520
  Advertising and News, 498, 503
  — and Population, 502
  Agricultural - Implement Factories, 516
  Averages and Individuals, 366, 512
  Business-Concerns and Factories, 512
  — — and Population, 511
  Capital and Population, 110, 515
  Centralization and Decentralization, 148
  Cities, 364
  Classes of Commercialism, 430

RELATIVE GROWTHS (*continued*)
  Commercialism and Production, 392-398, 432, 456, 469, 474, 519
  Communication and Population, 6, 14, 20, 22, 489, 496
  Cosmetics, 518
  Credit-Bases and Price-Index, 123
  Factories and Population, 507, 515
  Food and Population, 374
  Invention and Commercialism, 512
  — and Population, 487
  Manufactures, Different, 517
  — and Population, 507, 515
  Men's Furnishings, 518
  Merchant Marine and Exports, 15
  Charity, Need and Supply of, 341
  Occupations, Broad Classes of, 360
  —, Domestic and Factory, 360
  Periodicals and Population, 496, 518
  Prices of Agricultural and Manufactured Goods, 525
  Printing and Publishing, 518
  Production and Commercialism, 392-398, 432, 456, 469, 474, 519
  Profit-Sharing and Commercialism, 153
  Purchasing-Power and Nutriment, 238
  Raw Material and Population, 385, 478
  Supply and Prices, 380
  Technology and Commercialism, 402, 432, 435
  Textile Materials, 374, 478
  Tobacco, 374, 478, 518
  Wage-Earners per Factory, 508, 515
  — — and Population, 507, 515
  Wages and Prices, 527, 531
  Wealth, Classes of, 465
  Women's Clothing, 518
Religion, Science and Sociology, 830, 833
Rent, 196, 199, 243
—, Commercial, 243
—, Natural, 200
—, Receipt vs. Payment of, 201
Replacements. *See* Costs
Repudiation, 79, 563
Requisitions. *See* Credit, Factory-System
Responsibility, Social, 226, 482, 523, 574, 584, 639, 697, 737, 738, 744, 746, 798, 801, 803, 804, 809, 821
Retail Trade. *See* Selling, 121, 164, 325, 407, 610, 618
Revolution. *See* French Revolution, 559, 690, 696, 704, 714, 722, 730, 750, 753, 819, 821, 827, 846
— of 1848, 557, 580, 717, 757
Rice, 374, 478
Riches. *See* Incomes, Disparity, Wealth
Rights of Man, 584, 641, 727
Ripley, Mr., President Santa Fé R.R., 275, 309, 324
Risk, Commercial, 209, 256, 282, 460, 462
River-Navigation, 9, 13
Robbery, Economic. *See* Surplus, 792
Robitzek, Justice Harry, 243
Rockefeller, Mr. J. D., 95, 730, 805
Rock Island R.R., 315
Rooney, Mr. J. J., 543
Roosevelt, Theodore, 704, 708
Rubinow, Dr. I. M., 114
Russia, Soviet, 744, 757
Ryan, Mr. John D., 670

Sage, Russell, 103
Sailing-Ships, 14, 27
Salaries, 441, 442, 448, 455
Salary-Coefficients, 451
Salt, 385
Savings, 112, 218, 259, 301, 345, 730
— Banks, 111, 112, 465

Schwab, Mr. Charles M., 103
Science. *See* Sociology, 391, 435, 618
Scientific Monthly, 692
— Superstitions, 814
Seasonal Trades and Unemployment, 630
Securities. *See* Stock, 67, 76, 82, 99, 109, 123, 213, 254, 262, 279, 330, 465, 472, 569, 571, 665, 696, 714, 750, 753, 826
—, Aggregate, 110
— and Invention, 486
—, Rate of Issue of, 77, 90, 95, 101, 103, 107, 110, 123, 262, 465
Seligman, Professor, 542
Selling, 160, 344, 618
Series and Parallel in Economics, 513
Sheep, 375
Sherman Anti-Trust Law, 94, 317, 452, 510, 515, 670, 707
Shoe-Making, Modern, 51
Shonts, Theodore P., 683
Shop-Orders. *See* Credit Factory-System
Silent Panic of 1914, 654, 660, 663, 665, 668
Silver, 385, 478
Site, 192, 196, 199
Slavery, Economic, 242
—, Negro, 8, 11, 360, 389, 704, 719
Slums, 683
Social Air-Brake, 480
— Analysis, 372, 442, 481
— Architects vs. Brickmasons, 180
— Auto-Intoxication, 471
— Cancer, 470
— Candor, 439, 812
— Catalytic, 71, 125, 570, 642
— Causes. *See* Social Subconsciousness, 385, 484, 716
— Components, 179, 182
— Consciousness. *See* Social Subconsciousness, 595
— Control. *See* Social Subconsciousness, 94, 251, 422, 491, 521, 536, 549, 713, 805, 809, 811, 813, 823, 824
Social Cowardice, 778
— Crises. *See* Crises, Revolution
— Degradation, 165, 177, 251, 338, 423, 472, 492, 615, 617, 618, 682, 818, 831
— Delusion, 56, 230, 471, 589, 591, 600, 619, 638, 679, 791
— Derelicts, 338, 831
— Despotism. *See* Economic Despotism, Social Subconsciousness
— Diversity, 30
— Dogmatism, 759, 832
— Efficiency. *See* Economic, 129, 178, 185, 373, 383, 470
— Energetics, 157, 239, 373, 438, 556, 618, 632, 638, 642, 717, 812, 832
— Energy, 79, 812
— Equilibrium, Unstable. *See* Crises, Revolution, 842
— Erosion, 251
— Ethics. *See* Economics and Ethics, Cowardice, Patriotism, 823, 831
— Evolution. *See* Relative Growths, 45, 48, 91, 111, 124, 124, 148, 171, 183, 188, 238, 325, 358, 374, 399, 406, 432, 439, 450, 520, 522, 532, 546, 560, 626, 655, 662, 678, 682, 723, 810, 812, 825
— Faith, 758
— Flotsam, 338, 831
— Fluidity, 248, 364, 615, 634, 770
— Forces. *See* Economic Forces, Social Subconsciousness
— —, Transmision of, 723
— Gravitation. *See* Degradation, 142, 251, 369
— Immorality, 56, 63, 244, 425, 604, 609
— Impotence. *See* Politics, Social Subconsciousness, 37, 603
— Indirectness, 812
— Inertia, 202, 633
— Instability. *See* Revolution, 74, 98, 173, 263, 585, 622, 640, 653, 669, 677, 694, 708, 752

Social Lag, 23, 149, 488, 703, 835
— Malnutrition. *See* Famine, Life-Support, 238, 470, 841
— Metabolism, 31, 188, 198, 238, 340, 430, 458, 470, 570, 579, 839
— Migration, 360, 368, 373, 386, 633
— Motor-Nerves, 40
— Optimism, 616, 829
— Origins. *See* Capitalism, Social Subconsciousness
— Paradoxes, 605, 612, 614, 632, 637, 638, 682
— Pathology, 1, 470, 581, 588
— Perfection, 42, 178, 587
— Philosophies, 181, 253, 584, 599, 615, 639, 682, 703, 715, 740, 748, 759, 823, 831, 843
— Philosophy, Bitter. *See* Discontent, 181, 253, 584, 599, 615, 639, 682, 759
— —, Inconsistency in, 53, 69, 129, 136, 144, 150, 155, 156, 169, 175, 187, 284, 349, 439, 614, 638, 731, 783
— —, Technical. *See* Sociology, 642
— Potentialities, 183, 330, 410, 477, 556, 637
— Procreation, 617
— Propinquity, 29, 484
— Reform. *See* Reform, 170, 378, 434, 713, *723*
— Reactions. *See* Social Subconsciousness, 579
— Relationships vs. Component Personalities, 179, 182
— Responsibility. *See* Responsibility
— Science and Religion, 830
— Solidarity. *See* Social Stability
— Sovereignty. *See* Economic Sovereignty, Ultimate Consumer
— Stability. *See* Revolution, 42, 173, 585, 622, 789
Social Subconsciousness, 39, 48, 56, 60, 100, 231, 236, 242, 244, 253, 370, 383, 384, 400, 406, 422, 438, 472, 484, 486, 492, 499, 512, 520, 536, 560, 594, 596, 603, 606, 632, 635, 638, 642, 680, 701, 708, 716, 724, 727, 730, 747, 753, 781, 809, 813, 847
Social Tyranny. *See* Social Subconsciousness, 718
— Vitality, 79, 479
— Will. *See* Social Subconsciousness
Socialism. *See* Intercollegiate, Rand, 252, 288, 297, 515, 570, 596, 602, 639, 698, 702, 708, 711, 713, 732, 737, 740, 755, 757, 788
— and Economic Democracy, 749, 755, 758
Sociology, Definition of, 179, 182, 703, 712
—, Orthodox or Professional, 230, 371, 438, 452, 470, 510, 603, 638, 642, 656, 658, 670, 691, 695, 697, 716, 721, 732, 738, 749, 751, 753, 778, 782, 799, 804, 806, 812, 814
— — and Bank-Failures, 662
—, Technical, 157, 239, 373, 438, 556, 618, 632, 638, 642, 813
Sociodynamics. *See* Social Energetics
Sombart, Werner, 361
Sovereignty, Economic. *See* Economic, Ultimate Consumer
Soviet, 744, 757
Spahr, Dr. Charles B., 447, 692
Specialization, 50, 63
Special Privilege, 272, 403, 591, 834, 848
Speculation, 163
Spencer, Sir Herbert, 694
Stability, Social. *See* Revolution, 74, 98, 173, 585, 622, 640
Standards of Commercialism, 247, 294, 313, 415, 420, 483, 491

Standards of Ethics. *See* Economics and Ethics, 88, 192, 241, 244, 247, 294, 333, 415, 420, 483, 491
Starvation-Wage, 615, 628
State-Banks, 111, 112
Statistical Abstract, U. S., 110, 464
— Conservatism. *See* Omitted Losses, 430
Steam-Engine, 5, 24, 27
— Navigation, 7, 9, 11
Steel, 31, 108, 318, 385
— Company, Carnegie, 107
Stephenson, Robert, 18
Stevens, Albert C., 657
Stock. *See* Securities, 82, 109, 123, 254, 665
— lacking Face-Value, 256
— on Farms, 375
— Prices, 668
— Watering, 106, 224, 229, 257, 267, 315
Strikes, 346, 532, 676, 779
Subconscious Social Action. *See* Social Subconsciousness
Submarine Commercial Warfare, 294
Submerged Tenth, 616
Sugar, 374, 478
Sun, New York, 494
Superman, 832, 834, 837
592 Superstition, Economic. *See* Economic, Social Delusion
—, Scientific, 814
Supply and Demand. *See* Trade, 60, 161, 169, 233, 373, 377, 380, 499, 545, 548
— — in Labor, 633
Surplus, Economic, 113, 260, 264, 273, 458, 535
— Labor, 632, 634, 640
Swine, 375

Tallies, English, 81
Tariff, 387, 543, 680, 706
Taussig, Professor, 542, 549
Taxation, 572, 641, 691, 695
— without Representation, 727
Technology, 149, 387, 403, 435, 487, 520, 566
Telegraph, 27, 489, 521, 560
Telephone, 29, 246, 489, 521
Terminals, 20, 279, 411
Textile Industries, 392, 432
Theory of Interest. *See* Interest
Thermodynamics, 643, 645
Thiers, 79, 558, 650
Threshing-Machines, 24
Thrift. *See* Savings, 730
Thurber, F. B., 103
Thurston, Prof. R. H., 9
Time as a Factor in Social Evolution. *See* Relative Growths, 358, 522, 683, 825
Times, New York, 90, 94, 108, 243, 246, 298, 314, 318, 379, 501, 542, 567, 637, 665, 688, 709, 744, 773, 790, 802, 845
Tobacco, 374, 478, 518
Tourney, The Commercial, 174
Town-Meeting, 787
Trade, Paralysis of. *See* Economic Equilibrium, 241, 247
— and Transportation, 360
—, Volume of. *See* Economic Equilibrium, 241, 247, 347, 350
Trades-Unions, 346, 597, 640, 678, 708, 732
Traffic Charged All it will Bear. See Art, Literature, 232, 238, 276, 281, 381, 423, 498
—, Urban, 685
Transformation, Economic, 78
Transfusion of Economic Energy, 339
Transit-Facilities, 29, 683
— —, Journalism and, 352, 788
Transportation, 3, 6, 8, 11, 20, 22, 159, 346, 363, 394, 410, 426, 432, 484
—, Commercial Waste of, 346, 410, 426
— per Capita, Growth of, 20, 22
—, Vertical, 30
Treason to Civilization. *See* Patriotism, 640, 722, 806, 809, 820
Tribune, New York, 340
Tribute, Economic, 100, 137, 145, 228, 268

Tributary Theory of Interest. *See* Interest, 303
Trucking, 409
Trust Companies, 111, 112
Trust-Company Deposits, 465
Trusts, 91, 101, 113, 383, 510, 516
Turbine, 24, 27
Turbulence, Economic. *See* Discontent, Economic
Typewriter, 29
Tyranny, Economic. *See* Despotism, Social Subconsciousness

Ultimate Consumer. (Nearly every page in the book refers to this all-important topic. Below are indexed only the ideas of major prominence.)
— — the Economic Sovereign. *See* fifth topic below, Also Economic Sovereignty
— —, Feed the, 39
— —, Function of Voter Distinct from that of. *See* Economics and Politics, 242
— —, Organize as, 729, 775, 779
— — the Sole Source of Credit, 758
— — the Sole Source of Economic Power, 165, 197, 280, 331, 532, 572, 579, 586, 593, 678, 681, 709, 729, 749, 755, 758, 788
Ultimate vs. Intermediate Consumption, 162
Unearned Income. *See* Commercialism, Special Privilege, 753
Unemployment, 168, 241, 579, 594, 596, 598, 620, 639, 713, 739, 752
—, Basic Laws of, 509, 633, 636
—, Cause and Effect in, 599, 633
— and Credit, 619
—, Fruits of, 598, 604, 619, 622, 637, 639
—, Inanimate, 636
—, Incompetence and, 583, 611, 632
Unemployment, Laziness and, 581, 611
—, Qualitative and Quantitative, 605
—, Recent History of, 624, 626
— and Seasonal Trades, 630
—, Statistics of, 621, 624, 626, 629, 630
—, Technique of, 642
—, Voluntary, 581
Unions and Unionism, 346, 597, 640, 678, 708, 732
— and Unemployment, 623
United Shoe Machinery Company, 51
Universities. *See* Sociology, Education, 556, 721, 753, 792
— and Socialism, 733
University-Militarism, 815
— Sociology. *See* Sociology
U. S. Bureau of Labor Statistics, 443
U. S. Census, 357, 387, 443, 451, 495, 621, 697
U. S. Debt, 111, 465
U. S. Statistical Abstract, 110, 464
U. S. Steel Corporation, 107, 108, 318
Urban Transit, 29, 352, 683, 788

Vacant-Lot Farming, 545
Vacations. *See* Charity, 341
Valuation, 44, 68, 100, 105, 185, 188, 224, 243, 258, 302, 375, 606
— and Income, 68, 100, 105, 214, 224, 243, 258, 302, 750, 776
Value, 41, 44, 184, 188, 595, 606
Vanity, National, 382
Veal, 376
Vocation. *See* Occupation
Volume of Production. *See* Economic Equilibrium, 58, 241
— of Commercial Property, 461
Voluntary Social Action. *See* Social Subconsciousness
Voter vs. Ultimate Consumer. *See* Economics and Politics, 151, 242, 712, 714, 749

Wage-Coefficients, 446, 451
Wage-Earning, 360
— Fund, 642
—, Minimum, 628, 641, 679
—, Starvation, 615, 628
Wage-System, Competitive, 596, 602
Wages, 192, 441, 444, 455, 507, 524, 531, 602, 641, 674, 678, 746
—, General Trend of, 445, 450
—, Maxima and Minima of, 445
— and Purchasing-Power, 446
— and Salaries, Credit Based on, 123
— —, Relative, 452
Wages, Statistics of, 443
Wages, Who Pays, 532, 593, 678, 691, 747
Wall-Builders, Economic, 589
Wall Street Journal, 667
War and Commercialism, 68, 176, 191, 355, 416, 429, 434, 523, 552, 554, 566
War Industries Board, 426
War and Peace, 167, 183, 556, 559, 561
War and Prices. *See* Price, 527, 552
War as an Educator, 183, 650
War, Problems Following the, 727
Warehouses, 410
Wastes which Escape Statistical Measure. *See* Omitted Losses
Watered Stock. *See* Dead Horses, 106, 224, 229, 257, 267, 315
Water-Fronts, 411
Water-Power, 24
Watkins on Wealth, 459
Watt, James, 5, 124
Wealth. *See* Credit, Disparity, Incomes, 45, 48, 96, 336, 338, 384, 458, 465
—, Rate of Accumulation of, 90, 109, 218, 317
—, Dr. Spahr on Distribution of, 447
—, Professor Hayes on Distribution of, 217, 805
—, Statistics as to, 465
—, Watkins on, 459
Welfare-Work, 172, 165
Wheat, 374, 478
Wildman, Professor J. R., 101
Wisdom vs. Knowledge. *See* Education, Universities, 795
Women in Industry, 387
Women's Clothing. *See* Fashion, 414, 518
Wood on Wages, 443
Wool, 374, 478
World-Economics, 361, 379
— Factory, 60
— Tendencies, 368

X, Quantity, 391

Y, Quantity, 401
Yale University, 284, 526, 542, 815
Yoakum, Mr. B. F., 313

Zero Interest-Rate, 306

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